ThinkPad

ThinkPad® R60, R60e, R61, and R61i Hardware Maintenance Manual

November 2007

This manual supports:

ThinkPad R60
(MT 9455, 9456, 9457, 9458, 9459, 9444, 9445, 9460, 9461, 9462, 9463, 9464, 9446, and 9447)

ThinkPad R60e
(MT 0656, 0657, 0658, and 0659)

ThinkPad R61
(MT 8942, 8943, 8944, 8945, 8947, 8948, and 8949)

ThinkPad R61i
(MT 0656, 0657, 0658, 0659, 9455, 9456, 9457, 9458, 9459, 9444, 9445, 9460, 9461, 9462, 9463, 9464, 9446, 9447, 8942, 8943, 8944, 8945, 8947, 8948, and 8949)

ThinkPad

ThinkPad® R60, R60e, R61, and R61i Hardware Maintenance Manual

Note

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 260.

on page 260

Third Edition (November 2007)

Contents

About this manual

This manual contains service and reference information for ThinkPad® R60, R60e, R61, and R61i (MT 0656, 0657, 0658, 0659, 9455, 9456, 9457, 9458, 9459, 9444, 9445, 9460, 9461, 9462, 9463, 9464, 9446, 9447, 8942, 8943, 8944, 8945, 8947, 8948, and 8949) products. Use this manual along with the advanced diagnostic tests to troubleshoot problems.

The manual is divided into sections as follows:

- The common sections provide general information, guidelines, and safety information required in servicing computers.
- The product-specific section includes service, reference, and product-specific parts information.

Important

This manual is intended for trained service personnel who are familiar with ThinkPad products. Use this manual along with the advanced diagnostic tests to troubleshoot problems effectively.

Before servicing a ThinkPad product, be sure to review the safety information under "Safety notices: multilingual translations" on page 7, "Safety information" on page 13, and "Laser compliance statement" on page 17.

Introduction

Important service information

Important

BIOS and device driver fixes are customer-installable. The BIOS and device drivers are posted on the customer support site `http://www.lenovo.com/support`

Advise customers to contact the Customer Support Center at 800-426-7378 if they need assistance in obtaining or installing any software fixes, drivers, and BIOS downloads.

Customers in Canada should call the Customer Support Center at 800-565-3344 for assistance or download information.

Strategy for replacing FRUs

Before replacing parts

Make sure that all software fixes, drivers, and BIOS downloads are installed before replacing any FRUs listed in this manual.

After a system board is replaced, ensure that the latest BIOS is loaded to the system board before completing the service action.

To download software fixes, drivers, and BIOS, do as follows:

1. Go to `http://www.lenovo.com/support`
2. Enter the product number of the computer or press Auto-detect button on the screen.
3. Select **Downloads and drivers**.
4. Follow the directions on the screen and install the necessary software.

Use the following strategy to prevent unnecessary expense for replacing and servicing FRUs:

- **If you are instructed to replace a FRU but the replacement does not correct the problem, reinstall the original FRU before you continue**.
- Some computers have both a processor board and a system board. If you are instructed to replace either the processor board or the system board, and replacing one of them does not correct the problem, reinstall that board, and then replace the other one.
- If an adapter or a device consists of more than one FRU, any of the FRUs may be the cause of the error. Before replacing the adapter or device, remove the FRUs, one by one, to see if the symptoms change. Replace only the FRU that changed the symptoms.

Attention: The setup configuration on the computer you are servicing may have been customized. Running Automatic Configuration may alter the settings. Note the current configuration settings (using the View Configuration option); then, when service has been completed, verify that those settings remain in effect.

Strategy for replacing a hard disk drive

Always try to run a low-level format before replacing a hard disk drive. This will cause all customer data on the hard disk to be lost. Be sure that the customer has a current backup of the data before doing this task.

Attention: The drive startup sequence in the computer you are servicing may have been changed. Be extremely careful during write operations such as copying, saving, or formatting. If you select an incorrect drive, data or programs can be overwritten.

Important notice for replacing a system board

Some components mounted on a system board are very sensitive. Improper handling of a system board can cause damage to those components, and may cause a system malfunction.

Attention: When handling a system board:

- Do not drop a system board or apply any excessive force to it.
- Avoid rough handling of any kind.
- Avoid bending a system board and hard pushing to prevent cracking at each BGA (Ball Grid Array) chipset.

How to use error messages

Use the error codes displayed on the screen to diagnose failures. If more than one error code is displayed, begin the diagnosis with the first error code. Whatever causes the first error code may also cause false error codes. If no error code is displayed, see whether the error symptom is listed in the Symptom-to-FRU Index for the computer you are servicing.

Strategy for replacing FRUs for CTO, CMV, and GAV

Product definition

Dynamic Configure To Order (CTO)
This provides the ability for a customer to configure an IBM® or a Lenovo™ solution from an eSite, and have this configuration sent to fulfillment, where it is built and shipped directly to the customer. The machine label, Product Entitlement Warehouse (PEW), eSupport, and the HMM will load these products as the 4-digit MT and 3-digit model, where model = “CTO” (Example: 1829-CTO).

Custom Model Variant (CMV)
This is a unique configuration that has been negotiated between IBM or Lenovo and the customer. A unique 4-digit MT and 3-digit model is provided to the customer to place orders (Example: 1829-W15). A CMV is a special bid offering. Therefore, it is NOT generally announced.

- The MTM portion of the machine label is the 4-digit MT and 3-digit model, where model = “CTO” (Example: 1829-CTO). The PRODUCT ID portion of the machine label is the 4-digit MT and 3-digit CMV model (Example: 1829-W15).

- The PEW record is the 4-digit MT and 3-digit model, where model = "CTO" (Example: 1829-CTO).
- eSupport will show both the CTO and CMV machine type models (Example: 1829-CTO and 1829-W15 will be found on the eSupport site.)
- The HMM will have the 4-digit MT and 3-digit CTO model only (Example: 1829-CTO). Again, CMVs are custom models and are not found in the HMM.

General Announce Variant (GAV)
This is a standard model (fixed configuration). GAVs are announced and offered to all customers. The MTM portion of the machine label is a 4-digit MT and 3-digit model, where model = a "fixed part number", not "CTO" (Example: 1829-F1U). Also, PEW, eSupport, and the HMM will list these products under the same fixed model number.

FRU identification for CTO, CMV, and GAV products

There are three information resources to identify which FRUs are used to support CTO, CMV, and GAV products. These sources are PEW, eSupport, and the HMM.

Using PEW

- **PEW** is the primary source for identifying FRU part numbers and FRU descriptions for the key commodities for CTO, CMV and GAV products at a MT - serial number level. An example of key commodities are hard disk drives, system boards, microprocessors, Liquid Crystal Displays (LCDs), and memory.
- Remember, all CTO and CMV products are loaded in PEW under the 4-digit MT and 3-digit model, where model = "CTO" (Example: 1829-CTO). GAVs are loaded in PEW under the 4-digit MT and 3-digit model, where model = a "fixed part number", not "CTO" (Example: 1829-F1U).
- PEW can be accessed at the following Web site: `http://w3-3.ibm.com/pc/entitle`

  Customers can also access PEW via `http://www-307.ibm.com/pc/support/site.wss/product.do?template=/warranty/warranty.vm&sitestyle=lenovo`
  Select Warranty lookup. Input the MT and the Serial number and the list of key commodities will be returned in the PEW record under COMPONENT INFORMATION.
- **Business Partners** using Eclaim will access PEW when performing Entitlement Lookup. Business Partners will enter Loc ID, MT and Serial, and the key commodities will be returned in the Eclaim record under SYSTEM DETAILS.
- Authorized IBM Business Partners can access Eclaim at the following Web site: `https://wca.eclaim.com`

Using eSupport

For Key Commodities (Examples - hard disk drive, system board, microprocessor, LCD, and memory)

- eSupport can be used to view the list of key commodities built in a particular machine serial (this is the same record found in PEW).
- eSupport can be accessed at the following Web site: `http://www.lenovo.com/support`
- To view the key commodities, click on PARTS INFORMATION, then PARTS LOOKUP. Type in the model type and serial number. The key commodities will be returned in the eSupport record under PARTS SHIPPED WITH YOUR SYSTEM.

For the Remaining FRUs (the complete list of FRUs at the MT Model level)

- eSupport can be used to view the complete list of FRUs for a machine type and model.
- To view the complete list of FRUs, type in the machine type and model (Example: 1829-CTO) under QUICK PATH. Under “View by Document Type” select PARTS INFORMATION. Under “Filter by Category” select SERVICE PARTS. Under “Parts Information by Date” select SYSTEM SERVICE PARTS. The list of service parts by description, with applicable machine type model and FRU will be displayed.

Using the HMM

Use the HMM as a back-up to PEW and eSupport to view the complete list of FRUs at the MT Model level.

Important information about replacing RoHS compliant FRUs

RoHS, The Restriction of Hazardous Substances in Electrical and Electronic Equipment Directive (2002/95/EC) is a European Union legal requirement affecting the global electronics industry. RoHS requirements must be implemented on Lenovo products placed on the market and sold in the European Union after June 2006. Products on the market before June 2006 are not required to have RoHS compliant parts. If the original FRU parts are non compliant, replacement parts can also be non compliant. In all cases if the original FRU parts are RoHS compliant the replacement part must also be RoHS compliant.

Note: RoHS and non-RoHS FRU part numbers with the same fit and function are identified with unique FRU part numbers.

Lenovo plans to transition to RoHS compliance well before the implementation date and expects its suppliers to be ready to support Lenovo's requirements and schedule in the EU. Products sold in 2005 and 2006, will contain some RoHS compliant FRUs. The following statement pertains to these products and any product Lenovo produces containing RoHS compliant FRUs.

RoHS compliant FRUs have unique FRU part numbers. Before or after the RoHS implementation date, failed RoHS compliant parts must always be replaced using RoHS compliant FRUs, so only the FRUs identified as compliant in the system HMM or direct substitutions for those FRUs may be used.

Products marketed before June 2006		Products marketed after June 2006	
Current or original part	**Replacement FRU**	**Current or original part**	**Replacement FRU**
Non-RoHS	Can be Non-RoHS	Must be RoHS	Must be RoHS
Non-RoHS	Can be RoHS		
Non-RoHS	Can sub to RoHS		
RoHS	Must be RoHS		

Note: A direct substitution is a part with a different FRU part number that is automatically shipped by the distribution center at the time of the order.

Diskette compatibility matrix

The compatibility of each of the drives with the diskettes for it is as follows:

Diskette drive	Diskette capacity	Compatibility
3.5-inch	1.0 MB	Read and write
	2.0 MB	Read and write
	4.0 MB	Not compatible

Safety notices: multilingual translations

In this manual, safety notices appear in English with a page number reference to the appropriate multilingual, translated safety notice found in this section.

The following safety notices are provided in English, French, German, Hebrew, Italian, and Spanish.

Safety notice 1

Before the computer is powered on after FRU replacement, make sure all screws, springs, and other small parts are in place and are not left loose inside the computer. Verify this by shaking the computer and listening for rattling sounds. Metallic parts or metal flakes can cause electrical shorts.

Avant de remettre l'ordinateur sous tension après remplacement d'une unité en clientèle, vérifiez que tous les ressorts, vis et autres pièces sont bien en place et bien fixées. Pour ce faire, secouez l'unité et assurez-vous qu'aucun bruit suspect ne se produit. Des pièces métalliques ou des copeaux de métal pourraient causer un court-circuit.

Bevor nach einem FRU-Austausch der Computer wieder angeschlossen wird, muß sichergestellt werden, daß keine Schrauben, Federn oder andere Kleinteile fehlen oder im Gehäuse vergessen wurden. Der Computer muß geschüttelt und auf Klappergeräusche geprüft werden. Metallteile oder-splitter können Kurzschlüsse erzeugen.

לפני הפעלת המחשב לאחר החלפת FRU יש לוודא
שכל הברגים, הקפיצים, וחלקים קטנים אחרים נמצאים
במקומם ואינם חופשיים לזוז בתוך המחשב. כדי לוודא
זאת, יש לטלטל את המחשב ולהקשיב לגילוי קולות שקשוק.
חלקי או שבבי מתכת עלולים לגרום לקצרים חשמליים.

Prima di accendere l'elaboratore dopo che é stata effettuata la sostituzione di una FRU, accertarsi che tutte le viti, le molle e tutte le altri parti di piccole dimensioni siano nella corretta posizione e non siano sparse all'interno dell'elaboratore. Verificare ciò scuotendo l'elaboratore e prestando attenzione ad eventuali rumori; eventuali parti o pezzetti metallici possono provocare cortocircuiti pericolosi.

Antes de encender el sistema despues de sustituir una FRU, compruebe que todos los tornillos, muelles y demás piezas pequeñas se encuentran en su sitio y no se encuentran sueltas dentro del sistema. Compruébelo agitando el sistema y escuchando los posibles ruidos que provocarían. Las piezas metálicas pueden causar cortocircuitos eléctricos.

Safety notice 2

⚠ **DANGER**

Some standby batteries contain a small amount of nickel and cadmium. Do not disassemble a standby battery, recharge it, throw it into fire or water, or short-circuit it. Dispose of the battery as required by local ordinances or regulations. Use only the battery in the appropriate parts listing. Use of an incorrect battery can result in ignition or explosion of the battery.

Certaines batteries de secours contiennent du nickel et du cadmium. Ne les démontez pas, ne les rechargez pas, ne les exposez ni au feu ni à l'eau. Ne les mettez pas en court-circuit. Pour les mettre au rebut, conformez-vous à la réglementation en vigueur. Lorsque vous remplacez la pile de sauvegarde ou celle de l'horloge temps réel, veillez à n'utiliser que les modèles cités dans la liste de pièces détachées adéquate. Une batterie ou une pile inappropriée risque de prendre feu ou d'exploser.

Die Bereitschaftsbatterie, die sich unter dem Diskettenlaufwerk befindet, kann geringe Mengen Nickel und Cadmium enthalten. Sie darf nur durch die Verkaufsstelle oder den IBM Kundendienst ausgetauscht werden. Sie darf nicht zerlegt, wiederaufgeladen, kurzgeschlossen, oder Feuer oder Wasser ausgesetzt werden. Die Batterie kann schwere Verbrennungen oder Verätzungen verursachen. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Beim Ersetzen der Bereitschafts-oder Systembatterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

**סוללות המתנה מסוימות מכילות כמות קטנה
של ניקל וקדמיום. אין לפרק סוללת המתנה,
לטעון אותה מחדש, להשליך אותה לאש או
למים או לקצר אותה. יש לסלק את הסוללה
כנדרש על ידי התקנות והחוקים המקומיים. יש
להשתמש רק בסוללה המופיעה ברשימת החלקים
המתאימה. שימוש בסוללה לא מתאימה עלול
לגרום להצתה או התפוצצות של הסוללה.**

Alcune batterie di riserva contengono una piccola quantità di nichel e cadmio. Non smontarle, ricaricarle, gettarle nel fuoco o nell'acqua né cortocircuitarle. Smaltirle secondo la normativa in vigore (DPR 915/82, successive disposizioni e disposizioni locali). Quando si sostituisce la batteria dell'RTC (real time clock) o la batteria di supporto, utilizzare soltanto i tipi inseriti nell'appropriato Catalogo parti. L'impiego di una batteria non adatta potrebbe determinare l'incendio o l'esplosione della batteria stessa.

Algunas baterías de reserva contienen una pequeña cantidad de níquel y cadmio. No las desmonte, ni recargue, ni las eche al fuego o al agua ni las cortocircuite. Deséchelas tal como dispone la normativa local. Utilice sólo baterías que se encuentren en la lista de piezas. La utilización de una batería no apropiada puede provocar la ignición o explosión de la misma.

Safety notice 3

⚠ **DANGER**

The battery pack contains small amounts of nickel. Do not disassemble it, throw it into fire or water, or short-circuit it. Dispose of the battery pack as required by local ordinances or regulations. Use only the battery in the appropriate parts listing when replacing the battery pack. Use of an incorrect battery can result in ignition or explosion of the battery.

La batterie contient du nickel. Ne la démontez pas, ne l'exposez ni au feu ni à l'eau. Ne la mettez pas en court-circuit. Pour la mettre au rebut, conformez-vous à la réglementation en vigueur. Lorsque vous remplacez la batterie, veillez à n'utiliser que les modèles cités dans la liste de pièces détachées adéquate. En effet, une batterie inappropriée risque de prendre feu ou d'exploser.

Akkus enthalten geringe Mengen von Nickel. Sie dürfen nicht zerlegt, wiederaufgeladen, kurzgeschlossen, oder Feuer oder Wasser ausgesetzt werden. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Beim Ersetzen der Batterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

**מארז הסוללה מכיל כמות קטנה של ניקל
וקדמיום. אין לפרק את מארז הסוללה, להשליך
אותו לאש או למים או לקצר אותו. יש לסלק את
מארז הסוללה הסוללה כנדרש על ידי התקנות
והחוקים המקומיים. יש להשתמש רק בסוללה
המופיעה ברשימת החלקים המתאימה בזמן החלפת
מארז הסוללה. שימוש בסוללה לא מתאימה עלול
לגרום להצתה או התפוצצות של הסוללה.**

La batteria contiene piccole quantità di nichel. Non smontarla, gettarla nel fuoco o nell'acqua né cortocircuitarla. Smaltirla secondo la normativa in vigore (DPR 915/82, successive disposizioni e disposizioni locali). Quando si sostituisce la batteria, utilizzare soltanto i tipi inseriti nell'appropriato Catalogo parti. L'impiego di una batteria non adatta potrebbe determinare l'incendio o l'esplosione della batteria stessa.

Las baterías contienen pequeñas cantidades de níquel. No las desmonte, ni recargue, ni las eche al fuego o al agua ni las cortocircuite. Deséchelas tal como dispone la normativa local. Utilice sólo baterías que se encuentren en la lista de piezas al sustituir la batería. La utilización de una batería no apropiada puede provocar la ignición o explosión de la misma.

Safety notice 4

⚠ **DANGER**

The lithium battery can cause a fire, an explosion, or a severe burn. Do not recharge it, remove its polarized connector, disassemble it, heat it above 100°C (212°F), incinerate it, or expose its cell contents to water. Dispose of the battery as required by local ordinances or regulations. Use only the battery in the appropriate parts listing. Use of an incorrect battery can result in ignition or explosion of the battery.

La pile de sauvegarde contient du lithium. Elle présente des risques d'incendie, d'explosion ou de brûlures graves. Ne la rechargez pas, ne retirez pas son connecteur polarisé et ne la démontez pas. Ne l'exposez pas à une temperature supérieure à 100°C, ne la faites pas brûler et n'en exposez pas le contenu à l'eau. Mettez la pile au rebut conformément à la réglementation en vigueur. Une pile inappropriée risque de prendre feu ou d'exploser.

Die Systembatterie ist eine Lithiumbatterie. Sie kann sich entzünden, explodieren oder schwere Verbrennungen hervorrufen. Batterien dieses Typs dürfen nicht aufgeladen, zerlegt, über 100 C erhitzt oder verbrannt werden. Auch darf ihr Inhalt nicht mit Wasser in Verbindung gebracht oder der zur richtigen Polung angebrachte Verbindungsstecker entfernt werden. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Beim Ersetzen der Batterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

סוללת הליתיום עלולה לגרום לשריפה, להתפוצצות או לכוויות קשות. אין לטעון אותה מחדש, לסלק את המחבר המקוטב שלה, לפרק אותה או לחמם אותה לטמפרטורה העולה על 100 מעלות צלזיוס. אין לשרוף את הסוללה ואין לחשוף את תוכן התא למים. יש לסלק את הסוללה כנדרש בתקנות ובחוקים המקומיים. יש להשתמש רק בסוללה המופיעה ברשימת החלקים המתאימים. שימוש בסוללה אחרת עלול לגרום לסכנת שריפה או התפוצצות.

La batteria di supporto e una batteria al litio e puo incendiarsi, esplodere o procurare gravi ustioni. Evitare di ricaricarla, smontarne il connettore polarizzato, smontarla, riscaldarla ad una temperatura superiore ai 100 gradi centigradi, incendiarla o gettarla in acqua. Smaltirla secondo la normativa in vigore (DPR 915/82, successive disposizioni e disposizioni locali). L'impiego di una batteria non adatta potrebbe determinare l'incendio o l'esplosione della batteria stessa.

La batería de repuesto es una batería de litio y puede provocar incendios, explosiones o quemaduras graves. No la recargue, ni quite el conector polarizado, ni la desmonte, ni caliente por encima de los 100°C (212°F), ni la incinere ni exponga el contenido de sus celdas al agua. Deséchela tal como dispone la normativa local.

Safety notice 5

If the LCD breaks and the fluid from inside the LCD gets into your eyes or on your hands, immediately wash the affected areas with water for at least 15 minutes. Seek medical care if any symptoms from the fluid are present after washing.

Si le panneau d’affichage à cristaux liquides se brise et que vous recevez dans les yeux ou sur les mains une partie du fluide, rincez-les abondamment pendant au moins quinze minutes. Consultez un médecin si des symptômes persistent après le lavage.

Die Leuchtstoffröhre im LCD-Bildschirm enthält Quecksilber. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Der LCD-Bildschirm besteht aus Glas und kann zerbrechen, wenn er unsachgemäß behandelt wird oder der Computer auf den Boden fällt. Wenn der Bildschirm beschädigt ist und die darin befindliche Flüssigkeit in Kontakt mit Haut und Augen gerät, sollten die betroffenen Stellen mindestens 15 Minuten mit Wasser abgespült und bei Beschwerden anschließend ein Arzt aufgesucht werden.

אם מסך הגביש הנוזלי (LCD) נשבר והנוזל מתוך המסך בא במגע
עם עיניכם או ידיכם, שטפו את האזורים הנגועים מיד במים במשך
15 דקות לפחות. פנו לקבלת עזרה רפואית אם תסמינים הנובעים
מהמגע עם הנוזל נמשכים לאחר השטיפה.

Nel caso che caso l’LCD si dovesse rompere ed il liquido in esso contenuto entrasse in contatto con gli occhi o le mani, lavare immediatamente le parti interessate con acqua corrente per almeno 15 minuti; poi consultare un medico se i sintomi dovessero permanere.

Si la LCD se rompe y el fluido de su interior entra en contacto con sus ojos o sus manos, lave inmediatamente las áreas afectadas con agua durante 15 minutos como mínimo. Obtenga atención medica si se presenta algún síntoma del fluido despues de lavarse.

Safety notice 6

⚠ **DANGER**

To avoid shock, do not remove the plastic cover that protects the lower part of the inverter card.

Afin d’éviter tout risque de choc électrique, ne retirez pas le cache en plastique protégeant la partie inférieure de la carte d’alimentation.

Aus Sicherheitsgründen die Kunststoffabdeckung, die den unteren Teil der Spannungswandlerplatine umgibt, nicht entfernen.

**כדי למנוע התחשמלות, אין להסיר את מכסה הפלסטיק
המגן על חלקו התחתון של הכרטיס ההפוך.**

Per evitare scosse elettriche, non rimuovere la copertura in plastica che avvolge la parte inferiore della scheda invertitore.

Para evitar descargas, no quite la cubierta de plástico que rodea la parte baja de la tarjeta invertida.

Safety notice 7

⚠ **DANGER**

Though the main batteries have low voltage, a shorted or grounded battery can produce enough current to burn personnel or combustible materials.

Bien que le voltage des batteries principales soit peu élevé, le court-circuit ou la mise à la masse d'une batterie peut produire suffisamment de courant pour brûler des matériaux combustibles ou causer des brûlures corporelles graves.

Obwohl Hauptbatterien eine niedrige Spannung haben, können sie doch bei Kurzschluß oder Erdung genug Strom abgeben, um brennbare Materialien zu entzünden oder Verletzungen bei Personen hervorzurufen.

אף שהסוללות הראשיות הן בעלות מתח נמוך, סוללה מקוצרת או מוארקת עלולה להפיק זרם מספיק לגרימת כוויות או להצתת חומרים דליקים.

Sebbene le batterie di alimentazione siano a basso voltaggio, una batteria in corto circuito o a massa può fornire corrente sufficiente da bruciare materiali combustibili o provocare ustioni ai tecnici di manutenzione.

Aunque las baterías principales tienen un voltaje bajo, una batería cortocircuitada o con contacto a tierra puede producir la corriente suficiente como para quemar material combustible o provocar quemaduras en el personal.

Safety notice 8

⚠ **DANGER**

Before removing any FRU, power off the computer, unplug all power cords from electrical outlets, remove the battery pack, and then disconnect any interconnecting cables.

Avant de retirer une unité remplaçable en clientèle, mettez le système hors tension, débranchez tous les cordons d'alimentation des socles de prise de courant, retirez la batterie et déconnectez tous les cordons d'interface.

Die Stromzufuhr muß abgeschaltet, alle Stromkabel aus der Steckdose gezogen, der Akku entfernt und alle Verbindungskabel abgenommen sein, bevor eine FRU entfernt wird.

לפני סילוק FRU כלשהו, יש לכבות את המחשב, לנתק את כל כבלי החשמל משקעי החשמל, להוציא את מארז הסוללה, ואז לנתק כבלי חיבור אחרים אם יש כאלה.

Prima di rimuovere qualsiasi FRU, spegnere il sistema, scollegare dalle prese elettriche tutti i cavi di alimentazione, rimuovere la batteria e poi scollegare i cavi di interconnessione.

Antes de quitar una FRU, apague el sistema, desenchufe todos los cables de las tomas de corriente eléctrica, quite la batería y, a continuación, desconecte cualquier cable de conexión entre dispositivos.

Safety information

The following section presents safety information with which you need to be familiar before you service a ThinkPad computer.

General safety

Follow these rules to ensure general safety:

- Observe good housekeeping in the area of the machines during and after maintenance.
- When lifting any heavy object:
  1. Make sure that you can stand safely without slipping.
  2. Distribute the weight of the object equally between your feet.
  3. Use a slow lifting force. Never move suddenly or twist when you attempt to lift.
  4. Lift by standing or by pushing up with your leg muscles; this action removes the strain from the muscles in your back. *Do not attempt to lift any object that weighs more than 16 kg (35 lb) or that you think is too heavy for you.*
- Do not perform any action that causes hazards to the customer, or that makes the equipment unsafe.
- Before you start the machine, make sure that other service representatives and the customer's personnel are not in a hazardous position.
- Place removed covers and other parts in a safe place, away from all personnel, while you are servicing the machine.
- Keep your toolcase away from walk areas so that other people will not trip over it.
- Do not wear loose clothing that can be trapped in the moving parts of a machine. Make sure that your sleeves are fastened or rolled up above your elbows. If your hair is long, fasten it.
- Insert the ends of your necktie or scarf inside clothing or fasten it with a nonconductive clip, about 8 centimeters (3 inches) from the end.
- Do not wear jewelry, chains, metal-frame eyeglasses, or metal fasteners for your clothing.

  Attention: Metal objects are good electrical conductors.
- Wear safety glasses when you are hammering, drilling, soldering, cutting wire, attaching springs, using solvents, or working in any other conditions that might be hazardous to your eyes.
- After service, reinstall all safety shields, guards, labels, and ground wires. Replace any safety device that is worn or defective.
- Reinstall all covers correctly before returning the machine to the customer.
- Fan louvers on the machine help to prevent overheating of internal components. Do not obstruct fan louvers or cover them with labels or stickers.

Electrical safety

Observe the following rules when working on electrical equipment.

Important

Use only approved tools and test equipment. Some hand tools have handles covered with a soft material that does not insulate you when working with live electrical currents.

Many customers have, near their equipment, rubber floor mats that contain small conductive fibers to decrease electrostatic discharges. Do not use this type of mat to protect yourself from electrical shock.

- Find the room emergency power-off (EPO) switch, disconnecting switch, or electrical outlet. If an electrical accident occurs, you can then operate the switch or unplug the power cord quickly.
- Do not work alone under hazardous conditions or near equipment that has hazardous voltages.
- Disconnect all power before:
  - Performing a mechanical inspection
  - Working near power supplies
  - Removing or installing Field Replaceable Units (FRUs)
- Before you start to work on the machine, unplug the power cord. If you cannot unplug it, ask the customer to power-off the wall box that supplies power to the machine, and to lock the wall box in the off position.
- If you need to work on a machine that has *exposed* electrical circuits, observe the following precautions:
  - Ensure that another person, familiar with the power-off controls, is near you.

    Attention: Another person must be there to switch off the power, if necessary.
  - Use only one hand when working with powered-on electrical equipment; keep the other hand in your pocket or behind your back.

    Attention: An electrical shock can occur only when there is a complete circuit. By observing the above rule, you may prevent a current from passing through your body.
  - When using testers, set the controls correctly and use the approved probe leads and accessories for that tester.
  - Stand on suitable rubber mats (obtained locally, if necessary) to insulate you from grounds such as metal floor strips and machine frames.

  Observe the special safety precautions when you work with very high voltages; Instructions for these precautions are in the safety sections of maintenance information. Use extreme care when measuring high voltages.
- Regularly inspect and maintain your electrical hand tools for safe operational condition.
- Do not use worn or broken tools and testers.
- *Never assume* that power has been disconnected from a circuit. First, *check* that it has been powered off.
- Always look carefully for possible hazards in your work area. Examples of these hazards are moist floors, nongrounded power extension cables, power surges, and missing safety grounds.
- Do not touch live electrical circuits with the reflective surface of a plastic dental mirror. The surface is conductive; such touching can cause personal injury and machine damage.

- Do not service the following parts *with the power on* when they are removed from their normal operating places in a machine:
  - Power supply units
  - Pumps
  - Blowers and fans
  - Motor generators

  and similar units. (This practice ensures correct grounding of the units.)
- If an electrical accident occurs:
  - Use caution; do not become a victim yourself.
  - Switch off power.
  - Send another person to get medical aid.

Safety inspection guide

The purpose of this inspection guide is to assist you in identifying potentially unsafe conditions. As each machine was designed and built, required safety items were installed to protect users and service personnel from injury. This guide addresses only those items. You should use good judgment to identify potential safety hazards due to attachment of non-ThinkPad features or options not covered by this inspection guide.

If any unsafe conditions are present, you must determine how serious the apparent hazard could be and whether you can continue without first correcting the problem.

Consider these conditions and the safety hazards they present:

- Electrical hazards, especially primary power (primary voltage on the frame can cause serious or fatal electrical shock)
- Explosive hazards, such as a damaged CRT face or a bulging capacitor
- Mechanical hazards, such as loose or missing hardware

To determine whether there are any potentially unsafe conditions, use the following checklist at the beginning of every service task. Begin the checks with the power off, and the power cord disconnected.

Checklist:

1. Check exterior covers for damage (loose, broken, or sharp edges).
2. Power off the computer. Disconnect the power cord.
3. Check the power cord for:
   a. A third-wire ground connector in good condition. Use a meter to measure third-wire ground continuity for 0.1 ohm or less between the external ground pin and the frame ground.
   b. The power cord should be the type specified in the parts list.
   c. Insulation must not be frayed or worn.
4. Check for cracked or bulging batteries.
5. Remove the cover.
6. Check for any obvious non-ThinkPad alterations. Use good judgment as to the safety of any non-ThinkPad alterations.
7. Check inside the unit for any obvious unsafe conditions, such as metal filings, contamination, water or other liquids, or signs of fire or smoke damage.
8. Check for worn, frayed, or pinched cables.

9. Check that the power-supply cover fasteners (screws or rivets) have not been removed or tampered with.

Handling devices that are sensitive to electrostatic discharge

Any computer part containing transistors or integrated circuits (ICs) should be considered sensitive to electrostatic discharge (ESD.) ESD damage can occur when there is a difference in charge between objects. Protect against ESD damage by equalizing the charge so that the machine, the part, the work mat, and the person handling the part are all at the same charge.

Notes

1. Use product-specific ESD procedures when they exceed the requirements noted here.
2. Make sure that the ESD protective devices you use have been certified (ISO 9000) as fully effective.

When handling ESD-sensitive parts:

- Keep the parts in protective packages until they are inserted into the product.
- Avoid contact with other people while handling the part.
- Wear a grounded wrist strap against your skin to eliminate static on your body.
- Prevent the part from touching your clothing. Most clothing is insulative and retains a charge even when you are wearing a wrist strap.
- Use the black side of a grounded work mat to provide a static-free work surface. The mat is especially useful when handling ESD-sensitive devices.
- Select a grounding system, such as those listed below, to provide protection that meets the specific service requirement.

  Note

  The use of a grounding system to guard against ESD damage is desirable but not necessary.

  – Attach the ESD ground clip to any frame ground, ground braid, or green-wire ground.
  – When working on a double-insulated or battery-operated system, use an ESD common ground or reference point. You can use coax or connector-outside shells on these systems.
  – Use the round ground prong of the ac plug on ac-operated computers.

Grounding requirements

Electrical grounding of the computer is required for operator safety and correct system function. Proper grounding of the electrical outlet can be verified by a certified electrician.

Laser compliance statement

Some models of ThinkPad computer are equipped from the factory with an optical storage device such as a CD-ROM drive or a DVD-ROM drive. Such devices are also sold separately as options. If one of these drives is installed, it is certified in the U.S. to conform to the requirements of the Department of Health and Human Services 21 Code of Federal Regulations (DHHS 21 CFR) Subchapter J for Class 1 laser products. Elsewhere, the drive is certified to conform to the requirements of the International Electrotechnical Commission (IEC) 825 and CENELEC EN 60 825 for Class 1 laser products.

If a CD-ROM drive, a DVD-ROM drive, or another laser device is installed, note the following:

⚠ **CAUTION:**

Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.

O uso de controles, ajustes ou desempenho de procedimentos diferentes daqueles aqui especificados pode resultar em perigosa exposição à radiação.

凡未在这里指明的任何控制用法、调整、行为，
都会导致严重后果。

Pour éviter tout risque d'exposition au rayon laser, respectez les consignes de réglage et d'utilisation des commandes, ainsi que les procédures décrites.

Werden Steuer- und Einstellelemente anders als hier festgesetzt verwendet, kann gefährliche Laserstrahlung auftreten.

Az itt előírt eljárásoktól, beállításoktól és vezérlésektől
eltérni a lézersugárzás veszélye miatt kockázatos !

L'utilizzo di controlli, regolazioni o l'esecuzione di procedure diverse da quelle specificate possono provocare l'esposizione a.

Использование элементов настройки и
выполнение процедур иных, чем указано
здесь, может привести к опасному
радиационному облучению.

Použitie kontrôl, úprav alebo iných vykonaní od iných
výrobcov, ako je v tomto špecifikované, mohlo by mať
za následok nebezpečenstvo vystavenia sa vyžiarovaniu.

El uso de controles o ajustes o la ejecución de procedimientos distintos de los aquí especificados puede provocar la exposición a radiaciones peligrosas.

Opening the CD-ROM drive, the DVD-ROM drive, or any other optical storage device could result in exposure to hazardous laser radiation. There are no serviceable parts inside those drives. **Do not open.**

A CD-ROM drive, a DVD-ROM drive, or any other storage device installed may contain an embedded Class 3A or Class 3B laser diode. Note the following:

DANGER

Emits visible and invisible laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

Radiação por raio laser ao abrir. Não olhe fixo no feixe de luz, não olhe diretamente por meio de instrumentos óticos e evite exposição direta com o feixe de luz.

开启时会有激光发射时，请勿盯视激光光束，请勿直接查看
视觉仪器，并且避免直接接触在激光光束之中。

Rayonnement laser si carter ouvert. Évitez de fixer le faisceau, de le regarder directement avec des instruments optiques, ou de vous exposer au rayon.

Laserstrahlung bei geöffnetem Gerät. Nicht direkt oder über optische Instrumente in den Laserstrahl sehen und den Strahlungsbereich meiden.

Kinyitáskor lézersugár ! Ne nézzen bele se szabad szemmel, se optikai eszközökkel. Kerülje a sugárnyalábbal való érintkezést !

Aprendo l'unità vengono emesse radiazioni laser. Non fissare il fascio, non guardarlo direttamente con strumenti ottici e evitare l'esposizione diretta al fascio.

Открывая, берегитесь лазерного излучения.
Не смотрите на луч, не разглядывайте его
с помощью оптических инструментов, а также
избегайте прямого воздействия лазерного луча.

Keď je laserová jednotka otvorená. Vyhnite sa priamemu
pohľadu a nehľadte priamo s optickými nástrojmi do lúča
a vyhnite sa priamemu vystaveniu lúčov.

Radiación láser al abrir. No mire fijamente ni examine con instrumental óptico el haz de luz. Evite la exposición directa al haz.

General descriptions

The descriptions in this chapter apply to any ThinkPad model that has the PC-Doctor® for DOS diagnostics program. Some descriptions might not apply to your particular computer.

Read this first

Before you go to the checkout guide, be sure to read this section.

Important notes

- **Only certified trained personnel should service the computer.**
- **Before replacing any FRU, read the entire page on removing and replacing FRUs.**
- **When you replace FRUs, use new nylon-coated screws.**
- **Be extremely careful during such write operations as copying, saving, or formatting.** Drives in the computer that you are servicing sequence might have been altered. If you select an incorrect drive, data or programs might be overwritten.
- **Replace a FRU only with another FRU of the correct model.** When you replace a FRU, make sure that the model of the machine and the FRU part number are correct by referring to the FRU parts list.
- **A FRU should not be replaced because of a single, unreproducible failure.** Single failures can occur for a variety of reasons that have nothing to do with a hardware defect, such as cosmic radiation, electrostatic discharge, or software errors. Consider replacing a FRU only when a problem recurs. If you suspect that a FRU is defective, clear the error log and run the test again. If the error does not recur, do not replace the FRU.
- **Be careful not to replace a nondefective FRU.**

What to do first

When you do return a FRU, you must include the following information in the parts exchange form or parts return form that you attach to it:

__ 1. Name and phone number of servicer
__ 2. Date of service
__ 3. Date on which the machine failed
__ 4. Date of purchase
__ 5. Failure symptoms, error codes appearing on the display, and beep symptoms
__ 6. Procedure index and page number in which the failing FRU was detected
__ 7. Failing FRU name and part number
__ 8. Machine type, model number, and serial number
__ 9. Customer's name and address

Note for warranty:
During the warranty period, the customer may be responsible for repair costs if the computer damage was caused by misuse, accident, modification, unsuitable physical or operating environment, or improper maintenance by the customer.

Following is a list of some common items that are not covered under warranty and some symptoms that might indicate that the system was subjected to stress beyond normal use.

Before checking problems with the computer, determine whether the damage is covered under the warranty by referring to the following list:

The following are not covered under warranty:
- LCD panel cracked from the application of excessive force or from being dropped
- Scratched (cosmetic) parts
- Distortion, deformation, or discoloration of the cosmetic parts
- Plastic parts, latches, pins, or connectors that have been cracked or broken by excessive force
- Damage caused by liquid spilled into the system
- Damage caused by the improper insertion of a PC Card or the installation of an incompatible card
- Improper disc insertion or use of an optical drive
- Diskette drive damage caused by pressure on the diskette drive cover, foreign material in the drive, or the insertion of a diskette with multiple labels
- Damaged or bent diskette eject button
- Fuses blown by attachment of a nonsupported device
- Forgotten computer password (making the computer unusable)
- Sticky keys caused by spilling a liquid onto the keyboard
- Use of an incorrect ac adapter on laptop products

The following symptoms might indicate damage caused by nonwarranted activities:
- Missing parts might be a symptom of unauthorized service or modification.
- If the spindle of a hard disk drive becomes noisy, it may have been subjected to excessive force, or dropped.

Related service information

This section provides information about the following:
- “Service Web site”
- “Restoring the factory contents by using Product Recovery discs”
- “Passwords” on page 23
- “Power management” on page 25

Service Web site

When the latest maintenance diskette and the system program service diskette become available, they will be posted on http://www.lenovo.com/spm

Restoring the factory contents by using Product Recovery discs

When the hard disk drive is replaced because of a failure, no Product Recovery program is on the new hard disk. In this case, you must use the recovery discs for the computer. Order the recovery discs and the hard disk drive at the same time so that you can recover the new hard disk drive with the pre-installed software when they arrive. For information on which discs to order, see “Recovery discs” on page 233.

To install the factory contents by using Product Recovery discs, do the following:

Note

The recovery process might take up to 2 hours.

1. Insert the **Rescue and Recovery™ Disk1 of 1** into the optical drive, then restart the computer. This will take several minutes.
2. When the “Welcome to Rescue and Recovery” screen is displayed, press **Continue**. In the Rescue and Recovery menu, select **Restore Your System**. A message giving a warning that USB devices used in recovery must be connected when the computer is turned on appears. Click **OK**.
3. “Restore Your System” window appears. Select **Restore my hard drive to the original factory state**, and click **Next**. A warning appears, click **Yes**. Then next menu appears. Select **I do not want to save any files** and click **Next**. Following menu appears with a warning, select **Next**. A warning appears not to power down the computer during the recovery process. Click **OK**. One more warning appears saying that recovery is intended only for unrecoverable system problems. Click **OK**.
4. The Terms and Conditions window appears, select **I accept these terms and conditions** and press **OK**. Previous menus may remain on the screen, but the Predesktop installer begins copying files. When this completes, the computer will restart and a window will ask you to insert a Product Recovery Supplemental Disk, if you have one. Press **No**.
5. You will then be prompted to insert Product Recovery Disk 1 into the optical drive. Insert the Product Recovery Disk 1 into the optical drive, and press **OK**. In similar fashion, you will be prompted to insert the remaining recovery discs until all the files are copied.
6. After all the files are copied, the computer will restart and return to the “Welcome to Rescue and Recovery” screen where a window “Recovering your system, this may take several minutes” appears and .IMZ files are processed.

A total progress bar allows you to audit this process, which will take about 8 minutes. The final recovery disc may be safely removed during this time, but may also be left in the optical drive since it is not bootable.

7. You will then be prompted to restart the computer. Select **Yes**. A warning window appears, giving you one last chance to stop the restart, but disappears automatically after about 5 seconds. File processing continues in DOS full screen mode for about two minutes and the computer restarts to the Windows® desktop. No user intervention is required (and should be avoided) after this point.
8. Windows setup continues on the desktop and DOS window for IBM system setup, with progress measured by a Factory Preinstallation window on the right side of the screen. The processes are updating installed softwares.

   A warning that antivirus software is not installed appears repeatedly in the system tray, but this should be ignored. The entire process at desktop takes about 25 minutes.
9. Then the computer restarts, does some more DOS full screen processing, and restarts again to a Windows desktop where factory preinstallation continues for about 12 more minutes, another restart to a DOS screen and then back to the Windows splash screen and back to the desktop for more preinstallation.

   This lasts about 10 more minutes and the computer restarts to do NTFS conversion and then restarts to the OOBE (Out of Box Experience) environment.

Passwords

As many as three passwords may be needed for any ThinkPad computer: the power-on password (POP), the hard-disk password (HDP), and the supervisor password (SVP).

If any of these passwords has been set, a prompt for it appears on the screen whenever the computer is turned on. The computer does not start until the password is entered.

Exception: If only an SVP is installed, the password prompt does not appear when the operating system is booted.

Power-on password:
A power-on password (POP) protects the system from being powered on by an unauthorized person. The password must be entered before an operating system can be booted.

Hard-disk password:
There are two hard-disk passwords (HDPs):

- User HDP—for the user
- Master HDP—for the system administrator, who can use it to get access to the hard disk even if the user has changed the user HDP

Note: There are two modes for the HDP: **User only** and **Master + User**. The **Master + User** mode requires two HDPs; the system administrator enters both in the same operation. The system administrator then provides the user HDP to the system user.

Attention: If the user HDP has been forgotten, check whether a master HDP has been set. If it has, it can be used for access to the hard disk drive. If no master HDP is available, neither Lenovo nor Lenovo authorized servicers provide any services to reset either the user or the master HDP, or to recover data from the hard disk drive. The hard disk drive can be replaced for a scheduled fee.

Supervisor password:
A supervisor password (SVP) protects the system information stored in the BIOS Setup Utility. The user must enter the SVP in order to get access to the BIOS Setup Utility and change the system configuration.

Attention: If the SVP has been forgotten and cannot be made available to the servicer, there is no service procedure to reset the password. The system board must be replaced for a scheduled fee.

How to remove the power-on password

To remove a POP that you have forgotten, do the following:

(A) If no SVP has been set:

1. Turn off the computer.
2. Remove the battery pack.

   For how to remove the battery pack, see “1010 Battery pack” on page 58.
3. Remove the backup battery.

   For how to remove the backup battery, see “1120 Backup battery” on page 79.
4. Turn on the computer and wait until the POST ends.

After the POST ends, the password prompt does not appear. The POP has been removed.

5. Reinstall the backup battery and the battery pack.

(B) If an SVP has been set and is known by the servicer:

1. Turn on the computer; then, while the “To interrupt normal startup, press the blue ThinkVantage® button” message is displayed at the lower-left of the screen, press the ThinkVantage button. The Rescue and Recovery screen opens.

   For models supporting the Passphrase function, press F1 while the POP icon is appearing on the screen; then enter the POP. For the other models, enter the POP.

   Note: To check whether the ThinkPad computer supports the Passphrase function, enter the BIOS Setup Utility and go to **Security** --> **Password**. If the **Using Passphrase** item is displayed in the menu, this function is available on the ThinkPad computer.
2. Click **Access BIOS**. The system Restart Required window is displayed.
3. Click **Yes**. The computer restarts, and the BIOS Setup Utility screen opens.
4. Select **Security**, using the cursor directional keys to move down the menu.
5. Select **Password**.
6. Select **Power-On Password**.
7. Type the current SVP in the **Enter Current Password** field. then leave the **Enter New Password** field blank, and press Enter twice.
8. In the Changes have been saved window, press Enter.
9. Press F10; then, in the Setup confirmation window, select **Yes** .

How to remove the hard-disk password

Attention: If **User only** mode is selected and the user HDP has been forgotten and cannot be made available to the servicer, neither Lenovo nor Lenovo authorized servicers provide any services to reset the user HDPs or to recover data from the hard disk drive. The hard disk drive can be replaced for a scheduled fee.

To remove a user HDP that has been forgotten, when the SVP and the master HDP are known, do the following:

1. Turn on the computer; then, while the “To interrupt normal startup, press the blue ThinkVantage button” message is displayed at the lower-left of the screen, press the ThinkVantage button. The Rescue and Recovery screen opens.

   For models supporting the Passphrase function, press F1 while HDP icon is appearing on the screen; then enter the master HDP. For the other models, enter the master HDP.

   Note: To check whether the ThinkPad computer supports the Passphrase function, enter the BIOS Setup Utility and go to **Security** --> **Password**. If **Using Passphrase** item is displayed in the menu, this function is available on the ThinkPad computer.
2. Click **Access BIOS**. The system Restart Required window is displayed.
3. Click **Yes**. The computer restarts, and the BIOS Setup Utility screen opens.
4. Select **Security**, using the cursor directional keys to move down the menu.
5. Select **Password**.
6. Select **Hard-disk** *x* **password**, where *x* is the letter of the hard disk drive. A pop-up window opens.

7. Select **Master HDP**.
8. Type the current master HDP in the **Enter Current Password** field. then leave the **Enter New Password** field blank, and press Enter twice.
9. Press F10.
10. Select **Yes** in the Setup Configuration window.

    Both user HDP and master HDP will have been removed.

Power management

To reduce power consumption, the computer has three power management modes: screen blank, standby, and hibernation.

Screen blank mode

If the time set on the “Turn off monitor” timer in the operating system expires, the LCD backlight turns off.

To put the computer into screen blank mode, press the ThinkVantage button and use the ThinkVantage Productivity Center.

To end screen blank mode and resume normal operation, press any key.

Standby mode

When the computer enters standby mode, the following events occur in addition to what occurs in screen blank mode:
- The LCD is powered off.
- The hard disk drive is powered off.
- The CPU stops.

To enter standby mode, press Fn+F4.

Note: If you are using the ACPI operating system, you can change the action of Fn+F4.

In certain circumstances, the computer goes into standby mode automatically:
- If a “suspend time” has been set on the timer, and the user does not do any operation with the keyboard, the TrackPoint®, the hard disk, the parallel connector, or the diskette drive within that time.
- If the battery indicator blinks orange, indicating that the battery power is low. (Alternatively, if **Hibernate when battery becomes low** has been selected in the “Power Management Properties” window, the computer goes into hibernation mode.)

Note for the APM operating system:
Even if you do not set the low-battery alarm, the charge indicator notifies you when the battery is low, and then the computer enters the power-saving mode automatically. This default low-battery behavior is independent of the operating system; so if you have set the low-battery alarm, the computer may not do what you specified. It chooses either your setting or the default setting, whichever is appropriate.

If you are using the ACPI operating system, only the low-battery alarm is available.

To cause the computer to return from standby mode and resume operation, do one of the following:

- Press the Fn key.
- Open the LCD cover.
- Turn on the power switch.

Also, in either of the following events, the computer automatically returns from standby mode and resumes operation:

- The ring indicator (RI) is signaled by a serial device or a PC Card device.
- The time set on the resume timer elapses.

Note: The computer does not accept any input immediately after it enters standby mode. Wait a few seconds before taking any action to reenter operation mode.

Hibernation mode

In hibernation mode, the following occurs:

- The system status, RAM, VRAM, and setup data are stored on the hard disk.
- The system is powered off.

Note: If the computer enters the hibernation mode while it is docked to the ThinkPad Advanced Dock or ThinkPad Advanced Mini Dock, do not undock it before resuming normal operation. If you do undock it and then try to resume normal operation, you will get an error message, and you will have to restart the system.

To cause the computer to enter hibernation mode, do any of the following:

- Press the Fn+F12 keys.
- If you are using the APM operating system and have set the mode to **Power switch mode [Hibernation]**, turn off the power switch.
- If you are using the ACPI operating system and have defined one of the following actions as the event that causes the system to go into hibernation mode, perform that action.
  - Closing the lid.
  - Pressing the power button.
  - Pressing Fn+F4 keys.

Also, the computer goes into hibernation mode automatically in either of the following conditions:

- If a “hibernation time” has been set on the timer, and if the user does not do any operation with the keyboard, the TrackPoint, the hard disk drive, the parallel connector, or the diskette drive within that time.
- If the timer conditions are satisfied in suspend mode.
- If you are using the APM operating system and have set the mode to **Hibernate when battery becomes low**, and the battery charge becomes critically low.

When the power is turned on, the computer returns from hibernation mode and resumes operation. The hibernation file in the boot record on the hard disk drive is read, and system status is restored from the hard disk drive.

Checkout guide

Use the following procedures as a guide in identifying and correcting problems with the ThinkPad computer.

Note: The diagnostic tests are intended to test only ThinkPad products. The use of non-ThinkPad products, prototype cards, or modified options can lead to false indications of errors and invalid system responses.

1. Identify the failing symptoms in as much detail as possible.
2. Verify the symptoms. Try to re-create the failure by running the diagnostic test or by repeating the operation.

Testing the computer

The ThinkPad computer has a test program called PC-Doctor for DOS (hereafter called *PC-Doctor*.) You can detect errors by running the diagnostics test included in PC-Doctor. This section is an overview of the procedure. For details that depend on model-unique functions, refer to “Product overview” on page 34.

For some possible configurations of the computer, PC-Doctor might not run correctly. To avoid this problem, you need to initialize the computer setup by use of the BIOS Setup Utility before you run PC-Doctor. On the BIOS Setup Utility screen, press F9, Enter, F10, and then Enter.

Note: When you initialize the computer configuration, some devices are disabled, such as the serial port. If you test one of these devices, you will need to enable it by using Configuration utility for DOS. The utility is available on the following Web site: `http://www.lenovo.com/support`

PC-Doctor cannot be used to test a device that is in the ThinkPad Advanced Dock, even if the computer supports the ThinkPad Advanced Dock. To test a USB device, connect it to the USB connector of the computer.

Creating the PC-Doctor diagnostics diskette

To create the PC-Doctor disk from the Rescue and Recovery workspace, do as follows:

1. Enter the Rescue and Recovery workspace by pressing the ThinkVantage button during POST.
2. When the Rescue and Recovery workspace finishes loading, click **Diagnostic Diskette**.
3. Authenticating the digital signature takes about 15 seconds; then the ThinkPad computer will reboot into PC-DOS.
4. A batch file automatically starts up to prompt you through the process of creating diskettes. You are notified of how many diskettes you will need.
   a. You are prompted to insert each diskette in sequence.
   b. Typically, all you need to do is to press the Enter key for the floppy drive; the system then formats and creates the diskette.
   c. Each diskette is erased and formatted with the PC-Doctor for DOS boot image.
5. Once all the diskettes have been created, the ThinkPad computer will reboot. The user is asked to remove all diskettes from the drive, or to insert the first diskette created if it is desired to run the diagnostics.

To run the test, do as follows:

Note: In the following procedure, you can select an item not only with the arrow keys, but also with the TrackPoint pointer. Instead of pressing Enter, click the left button.

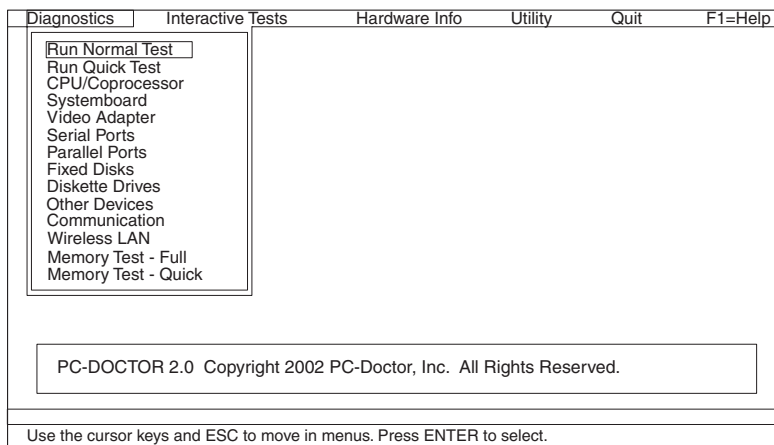
1. Insert the PC-Doctor disk into the diskette drive; then power on the computer.

   If the computer cannot be powered on, go to “Power system checkout” on page 30, and check the power sources.

   If an error code appears, go to “Symptom-to-FRU index” on page 46.

   On the first screen, select the model and press Enter. Follow the instructions on the screen.
2. The main panel of PC-Doctor appears.
3. Select **Diagnostics** with the arrow keys, and press Enter.

   A pull-down menu appears. (Its exact form depends on the model.)

   Note: PC-Doctor menu does not mean the formal support device list. Some unsupported device names may appear in the PC-Doctor menu.

The options on the test menu are as follows:

Diagnostics	Interactive Tests
• Run Normal Test • Run Quick Test • CPU/Coprocessor • Systemboard • Video Adapter • Serial Ports*1 • Parallel Ports*1 • Fixed Disks • Diskette Drives • Other Devices • ThinkPad Devices • Communication • Wireless LAN • Memory Test – Full • Memory Test – Quick	• Keyboard • Video • Internal Speaker • Mouse • Diskette • System Load • Optical Drive Test • Intel® Wireless Radio
Notes: • In the **Keyboard** test in **Interactive Tests**, the Fn key should be held down for at least 2 seconds; otherwise, it cannot be sensed. • **Video Adapter** test supports only the LCD display on the ThinkPad computer. If you have an external monitor attached to your computer, detach it before running PC-Doctor for DOS. • To test **Digital Signature Chip**, the security chip must be set to Active. • The options marked ***1** are only for R60. • To test **Serial Ports** or **Parallel Ports**, the ThinkPad computer must be attached to the ThinkPad Advanced Dock or ThinkPad Advanced Mini Dock.	

4. Run the applicable function test.
5. Follow the instructions on the screen. If there is a problem, PC-Doctor shows messages describing it.
6. To exit the test, select **Quit — Exit Diag**.

   To cancel the test, press Esc.

Note: After running PC-Doctor, check the time and date on the system and reset them if they are incorrect.

Detecting system information with PC-Doctor

PC-Doctor can detect the following system information:

Hardware Info

- System Configuration
- Memory Contents
- Physical Disk Drives
- Logical Disk Drives
- VGA Information
- IDE Drive Info
- PCI Information
- PNPISA Info
- SMBIOS Info
- VESA LCD Info
- Hardware Events Log

Utility

- Run External Tests
- Surface Scan Hard Disk
- Benchmark System
- DOS Shell
- Tech Support Form
- Battery Rundown
- View Test Log
- Print Log
- Save Log
- Full Erase Hard Drive
- Quick Erase Hard Drive

PC-Doctor for Windows

This product is designed to help you troubleshoot and resolve problems related to your computer. Select one of the categories listed below to display symptoms and solutions:

- CHECK SYSTEM HEALTH
- SYSTEM AND DEVICE TESTS
- LENOVO TROUBLESHOOTING
- CENTER
- SYSTEM REPORTS
- UPDATES AND SUPPORT

Power system checkout

To verify a symptom, do the following:

1. Turn off the computer.
2. Remove the battery pack.
3. Connect the ac adapter.
4. Check that power is supplied when you turn on the computer.
5. Turn off the computer.
6. Disconnect the ac adapter and install the charged battery pack.
7. Check that the battery pack supplies power when you turn on the computer.

If you suspect a power problem, see the appropriate one of the following power supply checkouts:

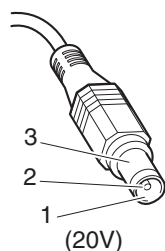
- “Checking the ac adapter” on page 31
- “Checking operational charging” on page 31
- “Checking the battery pack” on page 31
- “Checking the backup battery” on page 32

Checking the ac adapter

You are here because the computer fails only when the ac adapter is used.

- If the power problem occurs only when the ThinkPad Essential Port Replicator is used, replace the port replicator.
- If the power-on indicator does not turn on, check the power cord of the ac adapter for correct continuity and installation.
- If the computer does not charge during operation, go to ″Checking operational charging.″

To check the ac adapter, do the following:

1. Unplug the ac adapter cable from the computer.
2. Measure the output voltage at the plug of the ac adapter cable. See the following figure:

Pin	Voltage (V dc)
1	+20
2	0
3	Ground

Note: Output voltage of pin no.2 of the ac adapter may different from the one you are servicing.

3. If the voltage is not correct, replace the ac adapter.
4. If the voltage is acceptable, do the following:
   - Replace the system board.
   - If the problem persists, go to “Product overview” on page 34.

Note: Noise from the ac adapter does not always indicate a defect.

Checking operational charging

To check whether the battery charges properly during operation, use a discharged battery pack or a battery pack that has less than 50% of the total power remaining when installed in the computer.

Perform operational charging. If the battery status indicator or icon does not turn on, remove the battery pack and let it return to room temperature. Reinstall the battery pack. If the charge indicator or icon still does not turn on, replace the battery pack.

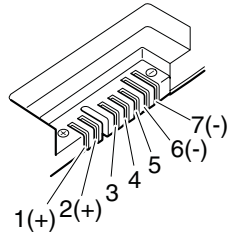
If the charge indicator still does not turn on, replace the system board. Then reinstall the battery pack. If it is still not charged, go to the next section.

Checking the battery pack

Battery charging does not start until the Power Meter shows that less than 95% of the total power remains; under this condition the battery pack can charge to 100% of its capacity. This protects the battery pack from being overcharged or from having a shortened life.

To check your battery, move your cursor to the Power Meter icon in the icon tray of the Windows taskbar and wait for a moment (but do not click), and the percentage of battery power remaining is displayed. To get detailed information about the battery, double-click the Power Meter icon.

Note: If the battery pack becomes hot, it may not be able to charge. Remove it from the computer and leave it at room temperature for a while. After it cools down, reinstall and recharge it.

To check the battery pack, do the following:
1. Power off the computer.
2. Remove the battery pack and measure the voltage between battery terminals 1 (+) and 7 (–). See the following figure:

Terminal	Voltage (V dc)
1	+ 0 to + 12.6
7	Ground (–)

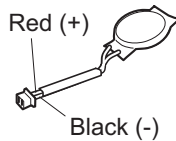
3. If the voltage is less than +11.0 V dc, the battery pack has been discharged.

   Note: Recharging will take at least 3 hours, even if the indicator does not turn on.

   If the voltage is still less than +11.0 V dc after recharging, replace the battery.
4. If the voltage is more than +11.0 V dc, measure the resistance between battery terminals 5 and 7. The resistance must be 4 to 30 K Ω.

   If the resistance is not correct, replace the battery pack. If the resistance is correct, replace the system board.

Checking the backup battery

Do the following:
1. Power off the computer, and unplug the ac adapter from it.
2. Turn the computer upside down.
3. Remove the battery pack (see "1010 Battery pack" on page 58).
4. Remove the backup battery (see "1120 Backup battery" on page 79).
5. Measure the voltage of the backup battery. See the following figure.

Wire	Voltage (V dc)
Red	+2.5 to +3.2
Black	Ground

- If the voltage is correct, replace the system board.
- If the voltage is not correct, replace the backup battery.
- If the backup battery discharges quickly after replacement, replace the system board.

ThinkPad R60, R60e, R61, and R61i

Product overview

This section presents the following product-unique information:
- "Specifications"
- "Status indicators" on page 38
- "FRU tests" on page 41
- "Fn key combinations" on page 43

Specifications

The following table lists the specifications of the ThinkPad R60, R60e, R61, and R61i:

Feature	Description
Processor	• Intel® Core™ Solo processor T1300 (1.6 GHz), 2-MB L2 cache • Intel Core Solo processor T1400 (1.83 GHz), 2-MB L2 cache • Intel® Core™ Duo processor T2300 (1.6 GHz), 2-MB L2 cache • Intel Core Duo processor T2300E (1.6 GHz), 2-MB L2 cache • Intel Core Duo processor T2400 (1.83 GHz), 2-MB L2 cache • Intel Core Duo processor T2450 (2.0 GHz), 2-MB L2 cache • Intel Core Duo processor T2500 (2.0 GHz), 2-MB L2 cache • Intel Core Duo processor T2600 (2.16 GHz), 2-MB L2 cache • Intel® Core™ 2 Duo processor T5250 (1.5 GHz), 2-MB L2 cache • Intel Core 2 Duo processor T5270 (1.4 GHz), 2-MB L2 cache • Intel Core 2 Duo processor T5300 (1.73 GHz), 2-MB L2 cache • Intel Core 2 Duo processor T5450 (1.66 GHz), 2-MB L2 cache • Intel Core 2 Duo processor T5470 (1.6 GHz), 2-MB L2 cache • Intel Core 2 Duo processor T5500 (1.66 GHz), 2-MB L2 cache • Intel Core 2 Duo processor T5550 (1.83 GHz), 2-MB L2 cache • Intel Core 2 Duo processor T5600 (1.83 GHz), 2-MB L2 cache • Intel Core 2 Duo processor T7100 (1.8 GHz), 2-MB L2 cache • Intel Core 2 Duo processor T7200 (2.0 GHz), 4-MB L2 cache • Intel Core 2 Duo processor T7250 (2.0 GHz), 2-MB L2 cache • Intel Core 2 Duo processor T7300 (2.0 GHz), 4-MB L2 cache • Intel Core 2 Duo processor T7400 (2.16 GHz), 4-MB L2 cache (continued)

(continued)

Feature	Description
Processor	• Intel Core 2 Duo processor T7500 (2.2 GHz), 4-MB L2 cache • Intel Core 2 Duo processor T7600 (2.33 GHz), 4-MB L2 cache • Intel Core 2 Duo processor T7700 (2.4 GHz), 4-MB L2 cache • Intel® Pentium® Dual Core processor T2080 (1.73 GHz), 1-MB L2 cache • Intel Pentium Dual Core processor T2130 (1.86 GHz), 1-MB L2 cache • Intel Pentium Dual Core processor T2310 (1.46 GHz), 1-MB L2 cache • Intel Pentium Dual Core processor T2330 (1.6 GHz), 1-MB L2 cache • Intel® Celelon® M Processor 410 (1.46 GHz), 1-MB L2 cache • Intel Celeron M processor 420 (1.6 GHz), 1-MB L2 cache • Intel Celeron M processor 430 (1.73 GHz), 1-MB L2 cache • Intel Celeron M processor 440 (1.86 GHz), 1-MB L2 cache • Intel Celeron M processor 450 (2.0 GHz), 1-MB L2 cache • Intel Celeron M processor 520 (1.6 GHz), 1-MB L2 cache • Intel Celeron M processor 530 (1.73 GHz), 1-MB L2 cache • Intel Celeron M processor 540 (1.86 GHz), 1-MB L2 cache
Bus architecture	• 667-MHz FSB • 533-MHz FSB for R61 and R61i (some models) • 800-MHz FSB for R61 and R61i (some models) • 667-MHz DDR2 SDRAM (PC2-5300) • PCI bus • PCI Express bus • DMI
Graphic memory chip	• 64-MB GDDR SDRAM (ATI M52-CSP64) • 64-MB GDDR SDRAM (ATI M62-CSP64) • 128-MB GDDR SDRAM (ATI M54-CSP128) • 128-MB GDDR SDRAM (ATI M64-CSP128) • Intel 940GML • Intel 945GM • Intel 965GM
Display	• 14.1-inch, 16M colors, XGA (1024 × 768 resolution) TFT color LCD • 14.1-inch, 16M colors, SXGA+ (1400 × 1050 resolution) TFT color LCD • 15.0-inch, 16M colors, XGA (1024 × 768 resolution) TFT color LCD • 15.0-inch, 16M colors, SXGA+ (1400 × 1050 resolution) TFT color LCD
Standard memory	• 256-MB DDR2-667 SDRAM SO-DIMM (PC2-5300) card × 1 • 512-MB DDR2-667 SDRAM SO-DIMM (PC2-5300) card × 1 • 1-GB DDR2-667 SDRAM SO-DIMM (PC2-5300) card × 1 • 2-GB DDR2-667 SDRAM SO-DIMM (PC2-5300) card × 1

(continued)

Feature	Description
Optional memory	• 256-MB DDR2-667 SDRAM SO-DIMM (PC2-5300) card × 1 • 512-MB DDR2-667 SDRAM SO-DIMM (PC2-5300) card × 1 • 1-GB DDR2-667 SDRAM SO-DIMM (PC2-5300) card × 1 • 2-GB DDR2-533 SDRAM SO-DIMM (PC2-4200) card × 1 • 2-GB DDR2-667 SDRAM SO-DIMM (PC2-5300) card × 1 (maximum of 4.0 GB) **Note:** Due to the limitation of the current 32-bit PC architecture, actual usable memory size is limited to 3 GB even though the physical installable memory size is 4 GB in ThinkPad R60, R60e, R61, and R61i computers.
CMOS RAM	• 242 bytes
Hard disk drive	• 40 GB, 5400 rpm, 9.5 mm high, Serial ATA (SATA) interface • 60 GB, 5400 rpm, 9.5 mm high, SATA interface • 80 GB, 5400 rpm, 9.5 mm high, SATA interface • 100 GB, 5400 rpm, 9.5 mm high, SATA interface • 120 GB, 5400 rpm, 9.5 mm high, SATA interface • 160 GB, 5400 rpm, 9.5 mm high, SATA interface • 160 GB, 5400 rpm, 9.5 mm high, SATA interface (FDE) • 60 GB, 7200 rpm, 9.5 mm high, SATA interface • 100 GB, 7200 rpm, 9.5 mm high, SATA interface • 160 GB, 7200 rpm, 9.5 mm high, SATA interface • 200 GB, 7200 rpm, 9.5 mm high, SATA interface (FDE) Supported hard disk drives depend on the model.
Ultrabay Enhanced™ device (some models)	• CD drive, 12.7 mm high • DVD drive, 12.7 mm high • DVD/CD-RW combo drive, 12.7 mm high • DVD-RAM/RW drive, 12.7 mm high
Fingerprint reader	Some models
I/O port	• External monitor connector • Stereo headphone jack • Monaural microphone jack • Docking connector (for some models) • RJ11 connector • RJ45 connector • Universal serial bus (USB) connector × 3 (compatible with USB 1.1 and 2.0) • IEEE 1394 connector (for some models) • Video-out connector (for some models)
Internal modem	• 56.6 Kbps
Audio	• Built-in stereo speakers • Built-in mono speakers • Software control volume
Ethernet (on the system board)	• Gigabit Ethernet

(continued)

Feature	Description
PCI Express Mini Card	• ThinkPad 11a/b/g Wireless LAN Mini PCI Express Adapter • Intel PRO Wireless 3945ABG Mini-PCI Express Adapter • Sierra Wireless EV-DO Wireless WAN Mini PCI Express Adapter • Sierra Wireless MC8755 PCI Express MiniCard • Integrated Cingular HSDPA 3G Wireless Broadband Network Adapter • ThinkPad 11a/b/g/n Wireless LAN Mini-PCI Express Adapter • Intel Wireless WiFi Link 4965AGN • Intel Wireless WiFi Link 4965AGN (11n disabled) • ThinkPad 11b/g Wireless LAN Mini-PCI Express Adapter II
PC Card /ExpressCard slots (some models)	• ExpressCard (34 module, 54 module) for upper slot • PC Card (Type-II) for lower slot
PC Card slot (some models)	• PC Card (Type-II)
Bluetooth wireless (some models)	• ThinkPad *Bluetooth* with Enhanced Data Rate (BDC-2)
Modem	• ThinkPad Modem (MDC-1.5, 56 kbps HDA)
Touch pad (some models)	• UltraNav®
ThinkLight®	Yes
Battery	• Li-ion battery (6 cells) 4.8 Ah (2.4 Ah x 2) • Li-ion battery (6 cells) 5.2 Ah (2.6 Ah x 2) • Li-ion battery (9 cells) 7.8 Ah (2.6 Ah x 3) • Ultrabay™ Slim Li Polymer battery (3 cells) (option)
AC adapter	• 65-watt type • 90-watt type
Preinstalled operating system	• Windows XP Home Edition • Windows XP Professional • Windows Vista® Home Premium (32 bit) • Windows Vista Home Basic (32 bit) • Windows Vista Business (32 bit) • Windows Vista Business (64 bit) • Windows Vista Ultimate (32 bit)

Status indicators

The system status indicators show the status of the computer, as follows:

Indicator	Meaning
1 Wireless LAN status	**Green:** The wireless feature (the IEEE 802.11 standard or IEEE 802.11n) is on, and the radio link is ready for use. **Blinking green:** Data is being transmitted.
2 *Bluetooth* status	**Green:** *Bluetooth* wireless is operational. This indicator is on when *Bluetooth* wireless is on and not in suspend mode. **Blinking green:** Data is being transmitted.
3 Wireless WAN status	**Green:** The wireless WAN is on, and the radio link is ready for use. **Blinking green:** Data is being transmitted.
4 Num lock	**Green:** The numeric keypad on the keyboard is enabled. To enable or disable the keypad, press and hold the Shift key, and press the NmLk (ScrLk) key.
5 Caps lock	**Green:** Caps Lock mode is enabled. To enable or disable Caps Lock mode, press the Caps Lock key.
6 Drive in use	**Green:** Data is being read from or written to the hard disk drive, the diskette drive, or the drive in the Ultrabay Enhanced device. When this indicator is on, do not put the computer into standby mode or turn off the computer. **Note:** Do not move the system while the green drive-in-use light is on. Sudden physical shock could cause drive errors.
7 Power on	**Green:** The computer is on and ready to use. This indicator stays lit whenever the computer is on and is not in standby mode.
8 Battery status	**Green:** The battery is charged between 80% to 100% of the capacity, and being discharged between 0% to 80% of the capacity. **Blinking green:** The battery is charged between 20% to 80% of the capacity, and being charged. **Orange:** The battery is charged between 5% and 20% of the capacity, and being discharged. **Blinking orange (slow):** The battery is charged between 5% to 20% of the capacity, and being charged. **Blinking orange (rapid):** The battery is charged between 0% to 5% of the capacity.

(continued)

Indicator		Meaning
9	AC power status	**Green:** The computer is connected to the ac power supply.
10	Standby status	**Green:** The computer is in standby mode. **Blinking green:** The computer is entering standby mode or hibernation mode, or is resuming normal operation.
11	Ultrabay Enhanced status	**Green:** An Ultrabay Enhanced device is installed and in use. **Blinking green:** An Ultrabay Enhanced device is in the process of being detached. **Turn off:** An Ultrabay Enhanced device is ready to be attached or detached. **Note:** If you are using Windows 2000, the Ultrabay Enhanced status indicator does not blink while an Ultrabay Enhanced device is being detached. Instead, a message box pops up when the process is completed; then the indicator turns off.

FRU tests

The following table shows the test for each FRU.

FRU	Applicable test
System board	1. **Diagnostics** --> **CPU/Coprocessor** 2. **Diagnostics** --> **Systemboard** 3. If the ThinkPad Advanced Dock, the ThinkPad Advanced Mini Dock or the ThinkPad Essential Port Replicator is attached to the ThinkPad computer, detach it. Place the computer on a horizontal surface, and run **Diagnostics** --> **ThinkPad Devices** --> **HDD Active Protection Test**. **Note:** Do not apply any physical shock to the computer while the test is running.
Power	**Diagnostics** --> **ThinkPad Devices** --> **AC Adapter**, **Battery 1 (Battery 2)**
LCD unit	1. **Diagnostics** --> **Video Adapter** 2. **Interactive Tests** --> **Video**
Modem daughter card (MDC-1.5)	1. Make sure the modem is set up correctly. 2. Replace the modem jack and the modem card in turn, and run the following tests in **Diagnostics** --> **Communication**: a. Conexant Smart Modem Interrupt b. Conexant Smart Modem Dialtone
Audio	Enter the BIOS Setup Utility and change Serial ATA (SATA) setting to **Compatibility**, and run **Diagnostics** --> **Other Devices** --> **Analog Devices HDA CODEC Test**
Speaker	**Interactive Tests** --> **Internal Speaker** **Note:** Once Modem/Audio test is done, the no sound is heard in this test. In this case, turn off and turn on the computer. Then, run this test again.
PC Card slot	1. **Diagnostics** --> **Systemboard** --> **PCMCIA**
ExpressCard slot	1. Insert a PCI-Express/USB Wrap card into the ExpressCard slot. 2. Turn on the computer. 3. Run **Diagnostics** --> **ThinkPad Devices** --> **ExpressCard slot**.
Keyboard	1. **Diagnostics** --> **Systemboard** --> **Keyboard** 2. **Interactive Tests** --> **Keyboard**
Hard disk drive	Enter the BIOS Setup Utility and change Serial ATA (SATA) setting to **Compatibility**, and run **Diagnostics** --> **Fixed Disks**
	You can also diagnose the hard disk drive without starting up the operating system. To diagnose the hard disk drive from the BIOS Setup Utility, do as follows: 1. Remove any diskette from the diskette drive, and then turn off the computer. 2. Turn on the computer. 3. While the message, "To interrupt normal startup, press the blue ThinkVantage button," is displayed at the lower left of the screen, press F1 to enter the BIOS Setup Utility. 4. Using cursor keys, select **HDD diagnostic program**. Press enter. 5. Using cursor keys, select **Main hard disk drive** or **Ultrabay hard disk drive**. 6. Press Enter to start the diagnostic program.

(continued)

FRU	Applicable test
Diskette drive	1. **Diagnostics** --> **Diskette Drives** 2. **Interactive Tests** --> **Diskette**
DVD drive or DVD/CD-RW combo drive	1. **Diagnostics** --> **Other Devices** --> **Optical Drive** 2. **Interactive Tests** --> **Optical Drive Test**
Memory	1. If two DIMMs are installed, remove one of them and run **Diagnostics** --> **Memory Test—Quick**. 2. If the problem does not recur, return the DIMM to its place, remove the other one, and run the test again. 3. If the test does not detect the error, run **Diagnostics** --> **Memory Test—Full**.
Fan	1. Turn on the computer and check the air turbulence at the louver near the PC Card slot. 2. Run **Diagnostics** --> **ThinkPad Devices** --> **Fan**.
TrackPoint or pointing device	If the TrackPoint does not work, check the configuration as specified in the BIOS Setup Utility. If the TrackPoint is disabled, select **Automatic** to enable it. After you use the TrackPoint, the pointer may drift on the screen for a short time. This drift can occur when a slight, steady pressure is applied to the TrackPoint pointer. This symptom is not a hardware problem. If the pointer stops after a short time, no service action is necessary. If enabling the TrackPoint does not correct the problem, continue with the following: • **Interactive Tests** --> **Mouse**
Touch pad	If the touch pad does not work, check the configuration as specified in the BIOS Setup Utility. If the touch pad is disabled, select **Automatic** to enable it. If enabling the touch pad does not correct the problem, continue with the following: • **Interactive Tests** --> **Mouse**

Fn key combinations

The following table shows the function of each combination of Fn with a function key.

Key combination	Description
Fn+F1	Reserved.
Fn+F2	Reserved.
Fn+F3	Select a power scheme that has been created by Power Manager. When you press this combination, a panel for selecting a power scheme appears. **Notes:** 1. To use the Fn+F3 key combination, you must have the ThinkPad PM device driver installed on the computer. 2. If you have logged on with an administrator user ID, and you press Fn+F3, the panel for selecting a power scheme appears. If you have logged on with another user ID, and you press Fn+F3, the panel does not appear.
Fn+F4	Put the computer in standby mode. To return to normal operation, press the Fn key only, without pressing a function key. **Notes:** 1. To use the Fn+F4 key combination, you must have the ThinkPad PM device driver installed on the computer. 2. This combination of keys also functions as a sleep button. If you want to use the combination to put the computer into hibernation mode or shut the computer down, change the settings in the Power Manager.
Fn+F5	Enable or disable the built-in wireless networking features and the *Bluetooth* features. If you press Fn+F5, a list of wireless features is displayed. You can quickly change the power state of each feature in the list. **Note:** If you want to use Fn+F5 to enable the feature specified in IEEE standard 802.11, the following device drivers must be installed on the computer beforehand: • ThinkPad Power Management driver • OnScreen Display Utility • Wireless device drivers
Fn+F6	Reserved.

(continued)

Key combination	Description
Fn+F7	Apply a presentation scheme directly, with no need to start Presentation Director. To disable this function and use the Fn+F7 key combination for switching a display output location, start Presentation Director, and change the settings.
	Switch a display output location • External monitor (CRT display) • Computer display and external monitor (LCD + CRT display) • Computer display (LCD) **Notes:** 1. This function is not supported if different desktop images are displayed on the computer display and the external monitor (the Extend desktop function). 2. This function does not work while a DVD movie or a video clip is playing. To enable this function, start Presentation Director, and change the Fn+F7 settings. **Note:** Multiple users can log on to a single operating system by using different user IDs. Each user needs to change the settings:
Fn+F8	Change the settings of the UltraNav® pointing device.
Fn+F9	Open the ThinkPad EasyEject Utility screen. Buttons for the following choices are displayed: • **Eject ThinkPad PC from Dock**: This button is displayed only if the ThinkPad computer has been attached to a ThinkPad Advanced Dock or a ThinkPad Advanced Mini Dock. The computer can be detached from the ThinkPad Advanced Dock or the ThinkPad Advanced Mini Dock. • **Eject ThinkPad PC from Mini Dock**: This button is displayed only if the ThinkPad computer has been attached to a ThinkPad Essential Port Replicator and one or more USB devices have been connected to the ThinkPad Essential Port Replicator. You can stop and remove all the USB devices safely by clicking the button. **Note:** You cannot use this Utility to detach the computer from the ThinkPad Essential Port Replicator. • **Run EasyEject Actions**: This button is used to select, stop, or remove external devices connected to the ThinkPad computer. • **Configure EasyEject Actions**: Opens the ThinkPad EasyEject Utility main window. • **Fn+F9 Settings**: Configures the settings for the Fn+F9 function.

(continued)

Key combination	Description
Fn+F10	Reserved.
Fn+F11	Reserved.
Fn+F12	Put the computer into hibernation mode. To return to normal operation, press the power button for less than four seconds. **Note:** To use Fn+F12 for hibernation, you must have the ThinkPad PM device driver installed on the computer.
Fn+PgUp	Turn the ThinkLight on or off. **Note:** This function is supported only on the ThinkPad computers that have the ThinkLight. The on or off status of the ThinkLight is shown on the screen for a few seconds when you press Fn+PgUp.
Fn+Home	The computer display becomes brighter.
Fn+End	The computer display becomes dimmer.
Fn+Spacebar	Enable the FullScreen Magnifier function.
Fn+PrtSc	Has the same function as the SysRq key.
Fn+ScrLk	Enable or disable the numeric keypad.
Fn+Pause	Has the same function as the Break key.
Fn+cursor keys	These key combinations work with Windows Media Player. Fn+down arrow key works for the Play or Pause button, Fn+up arrow key for the Stop button, Fn+right arrow key for the Next Track button, and Fn+left arrow key for the Previous Track button.

Symptom-to-FRU index

The symptom-to-FRU index in this section lists symptoms and errors and their possible causes. The most likely cause is listed first, in boldface type.

Note: Do the FRU replacement or other actions in the sequence shown in the column headed "FRU or action, in sequence." If replacing a FRU does not solve the problem, put the original part back in the computer. Do not replace a nondefective FRU.

This index can also help you determine, during regular servicing, what FRUs are likely to need to be replaced next.

A numeric error is displayed for each error detected in POST or system operation. In the displays, **n** can be any number.

If no numeric code is displayed, check the narrative descriptions of symptoms. If the symptom is not described there, go to "Intermittent problems" on page 53.

Note

For a device not supported by diagnostic codes in the ThinkPad notebook computers, see the manual for that device.

Numeric error codes

Symptom or error	FRU or action, in sequence
0175 Bad CRC1, stop POST task—The EEPROM checksum is not correct.	**System board.**
0176 System Security—The system has been tampered with.	1. **Run BIOS Setup Utility, and save the current setting by pressing F10.** 2. System board.
0177 Bad SVP data, stop POST task—The checksum of the supervisor password in the EEPROM is not correct.	**System board.**
0182 Bad CRC2. Enter BIOS Setup and load Setup defaults.—The checksum of the CRS2 setting in the EEPROM is not correct.	1. **Run BIOS Setup Utility. Press F9, and Enter to load the default setting. Then save the current setting by pressing F10.** 2. System board.
0185 Bad startup sequence settings. Enter BIOS Setup and load Setup defaults.	1. **Run BIOS Setup Utility. Press F9, and Enter to load the default setting. Then save the current setting by pressing F10.**
0187 EAIA data access error—The access to EEPROM is failed.	**System board.**
0188 Invalid RFID Serialization Information Area.	**System board.**
0189 Invalid RFID configuration information area—The EEPROM checksum is not correct.	**System board.**

Symptom or error	FRU or action, in sequence
0190 Critical low-battery error	1. **Charge the battery pack.** 2. Battery pack.
0191 System Security—Invalid Remote Change requested.	1. **Run BIOS Setup Utility, and then save current setting by pressing F10.** 2. System board.
0192 System Security— Embedded Security hardware tamper detected.	**System board.**
0199 System Security— Security password retry count exceeded.	1. **Run BIOS Setup Utility, and then save the current setting by pressing F10.** 2. System board.
01C8 Two or more modem devices are found. Remove all but one of them. Press <Esc> to continue.	1. **Remove either a Mini-PCI Card or a modem daughter card. Otherwise, press Esc to ignore the warning message.** 2. System board.
01C9 More than one Ethernet devices are found. Remove one of them. Press <Esc> to continue.	1. **Remove the Ethernet device that you installed; or press Esc to ignore the warning message.** 2. System board.
01CA More than one Wireless LAN devices are found. Remove one of them.	1. **Remove the wireless LAN device that you installed**. 2. System board.
0200 Hard disk error—The hard disk is not working.	1. **Reseat the hard disk drive.** 2. Load Setup Defaults in BIOS Setup Utility. 3. Hard disk drive. 4. System board.
021x Keyboard error.	**Run interactive tests of the keyboard and the auxiliary input device.**
0220 Monitor type error—Monitor type does not match the one specified in CMOS.	**Load Setup Defaults in BIOS Setup Utility.**
0230 Shadow RAM error—Shadow RAM fails at offset nnnn.	**System board.**
0231 System RAM error—System RAM fails at offset nnnn.	1. **DIMM.** 2. System board.
0232 Extended RAM error— Extended RAM fails at offset nnnn.	1. **DIMM.** 2. System board.
0250 System battery error—System battery is dead.	1. **Charge the backup battery for more than 8 hours by connecting the ac adapter.** 2. Replace the backup battery and run BIOS Setup Utility to reset the time and date.
0251 System CMOS checksum bad— Default configuration used.	1. **Charge the backup battery for more than 8 hours by connecting the ac adapter.** 2. Replace the backup battery and run BIOS Setup Utility to reset the time and date.

Symptom or error	FRU or action, in sequence
0252 Password checksum bad—The password is cleared.	**Reset the password by running BIOS Setup Utility.**
0260 System timer error.	1. **Charge the backup battery for more than 8 hours by connecting the ac adapter.** 2. Replace the backup battery and run BIOS Setup Utility to reset the time and date. 3. System board.
0270 Real-time clock error.	1. **Charge the backup battery for more than 8 hours by connecting the ac adapter.** 2. Replace the backup battery and run BIOS Setup Utility to reset the time and date. 3. System board.
0271 Date and time error—Neither the date nor the time is set in the computer.	**Run BIOS Setup Utility to reset the time and date.**
0280 Previous boot incomplete— Default configuration used.	1. **Load "Setup Default" in BIOS Setup Utility.** 2. DIMM. 3. System board.
02F0 CPU ID:xx Failed.	1. **CPU.** 2. System board.
02F4 EISA CMOS not writable.	1. **Load Setup Defaults in BIOS Setup Utility.** 2. Replace the backup battery. 3. System board.
02F5 DMA test failed.	1. **DIMM.** 2. System board.
02F6 Software NMI failed	1. **DIMM.** 2. System board.
02F7 Fail-safe timer NMI failed	1. **DIMM.** 2. System board.
1802 Unauthorized network card is plugged in—Turn off and remove the miniPCI network card.	1. **Remove Mini PCI network card.** 2. System board.
1803 Unauthorized daughter card is plugged in—Turn off and remove the daughter card.	1. **Remove the daughter card that you installed.** 2. System board.
1804 Unauthorized WAN card is plugged in—Power off and remove the WAN card.	1. **Remove the WAN card that you installed.** 2. System board.
1805 Unauthorized Wireless USB card is plugged in—Power off and remove the Wireless USB card.	1. **Remove the Wireless USB card that you installed.** 2. System board.

Symptom or error	FRU or action, in sequence
1820 More than one external fingerprint reader is attached. Power off and remove all but the reader that you set up within your main operating system.	**Remove all but the reader that you set up for the authentication.**
2000 Hard Drive Active Protection sensor diagnostics failed. Press <Esc> to continue. Press <F1> to enter SETUP	1. Undock docking station or port replicator if it is attached to the ThinkPad computer, and place the computer on a horizontal surface. Do not apply any physical shock to the computer. 2. Run **Diagnostics** --> **ThinkPad Devices** --> **HDD Active Protection Test**.
2010 Warning: Your internal hard disk drive (HDD) may not function correctly on this system. Ensure that your HDD is supported on this system and that the latest HDD firmware is installed.	Inform the following information to the customer: If in the primary bay the customer is using a non-IBM or non-Lenovo hard disk drive (HDD), or an old generation IBM HDD which is not supported by this system, with the risk in mind, the customer can still use it by pressing ESC. If in the primary drive bay the customer is using a supported IBM/Lenovo HDD with an old firmware, the customer needs to update its firmware to the latest. The latest version is available at `http://www.lenovo.com/support`
2100 Initialization error on HDD0 (Main hard disk drive)	1. **Reseat the hard disk drive.** 2. Main hard disk drive. 3. System board.
2102 Initialization error on HDD1 (Ultrabay hard disk drive)	1. **Reseat the hard disk drive.** 2. Ultrabay hard disk drive. 3. System board.
2110 Read error on HDD0 (Main hard disk drive)	1. **Reseat the hard disk drive.** 2. Main hard disk drive. 3. System board.
2112 Read error on HDD1 (Ultrabay hard disk drive)	1. **Reseat the hard disk drive.** 2. Ultrabay hard disk drive. 3. System board.

Error messages

Symptom or error	FRU or action, in sequence
Device address conflict.	1. **Load "Setup Defaults" in the BIOS Setup Utility**. 2. Backup battery. 3. System board.
Allocation error for device.	1. **Load "Setup Defaults" in the BIOS Setup Utility**. 2. Backup battery. 3. System board.
Failing bits: nnnn.	1. **DIMM**. 2. System board.
Invalid system configuration data.	1. **DIMM**. 2. System board.
I/O device IRQ conflict.	1. **Load "Setup Defaults" in the BIOS Setup Utility**. 2. Backup battery. 3. System board.
Hibernation error.	1. **Restore the system configuration to what it was before the computer entered hibernation mode**. 2. If memory size has been changed, re-create the hibernation file.
Fan error.	1. **Fan**. 2. Thermal grease. 3. System board.
Thermal sensing error.	**System board**.
Cannot boot from any device.	**Check the status of device which you want to boot from.** Device not found. 1. The device you want to boot from. 2. System board. Device Error. 1. The device you want to boot from. 2. System board. No valid operating system. 1. Check that the operating system has no failure and is installed correctly. 2. Reinstall the operation system. Excluded from boot order. • Enter the BIOS Setup Utility and add the device in boot order.

Beep symptoms

Symptom or error	FRU or action, in sequence
One beep and a blank, unreadable, or flashing LCD.	1. **Reseat the LCD connector**. 2. LCD assembly. 3. External CRT. 4. System board.
One long and two short beeps, and a blank or unreadable LCD.	1. **System board**. 2. LCD assembly. 3. DIMM.
Two short beeps with error codes.	**POST error. See "Numeric error codes" on page 46.**
Two short beeps and a blank screen.	1. **System board**. 2. DIMM.
Three short beeps, pause, three more short beeps, and one short beep.	1. **DIMM**. 2. System board
One short beep, pause, three short beeps, pause, three more short beeps, and one short beep.	
Only the cursor appears.	**Reinstall the operating system**.
Four cycles of four short beeps and a blank screen.	**System board** (security chip)
Five short beeps and a blank screen.	**System board**

No-beep symptoms

Symptom or error	FRU or action, in sequence
No beep, power-on indicator on, LCD blank, and no POST.	1. **Make sure that every connector is connected tightly and correctly**. 2. DIMM. 3. System board.
No beep, power-on indicator on, and LCD blank during POST.	1. **Reseat DIMM**. 2. System board.
The power-on password prompt appears.	A power-on password or a supervisor password is set. Type the password and press **Enter**.
The hard-disk password prompt appears.	A hard-disk password is set. Type the password and press **Enter**.

LCD-related symptoms

Important: The TFT LCD for the notebook computer contains many thin-film transistors (TFTs). The presence of a small number of dots that are missing, discolored, or always lighted is characteristic of TFT LCD technology, but excessive pixel problems can cause viewing concerns. The LCD should be replaced if the number of missing, discolored, or lighted dots in any background is as follows:

Minimum quantity of defective pixels required for LCD replacement on June 2006 or later manufactured ThinkPad

LCD resolution	Bright dots	Dark dots	Bright and dark dots
XGA, WXGA	5	6	6
WXGA+, SXGA+, WSXGA+	5	8	10
UXGA, WUXGA, QXGA	5	13	13

Notes:
1. Lenovo will not provide replacement if the LCD is within specification as we cannot guarantee that any replacement LCD will have zero pixel defects.
2. A bright dot means a pixel is always on (white or color.)
3. A dark dot means a pixel is always off (black color.)
4. One pixel consists of R, G, B sub-pixels.

Symptom or error	FRU or action, in sequence
No beep, power-on indicator on, and a blank LCD during POST.	**System board**.
• LCD backlight not working. • LCD too dark. • LCD brightness cannot be adjusted. • LCD contrast cannot be adjusted.	1. **Reseat the LCD connectors**. 2. LCD assembly. 3. System board.
• LCD screen unreadable. • Characters missing pixels. • Screen abnormal. • Wrong color displayed.	1. **See important note for “LCD-related symptoms.”** 2. Reseat all LCD connectors. 3. LCD assembly. 4. System board.
Horizontal or vertical lines displayed on LCD.	**LCD assembly**.

Intermittent problems

Intermittent system hang problems can be due to a variety of causes that have nothing to do with a hardware defect, such as cosmic radiation, electrostatic discharge, or software errors. FRU replacement should be considered only when a problem recurs.

When analyzing an intermittent problem, do the following:

1. Run the diagnostic test for the system board in loop mode **at least 10 times**.
2. If no error is detected, do **not** replace any FRUs.
3. If any error is detected, replace the FRU shown by the FRU code. Rerun the test to verify that no more errors exist.

Undetermined problems

If the diagnostic tests did not identify the adapter or device that has failed, if wrong devices are installed, or if the system simply is not operating, follow these procedures to isolate the failing FRU (do not isolate FRUs that have no defects).

Verify that all attached devices are supported by the computer.

Verify that the power supply being used at the time of the failure is operating correctly. (See “Power system checkout” on page 30.)

1. Turn off the computer.
2. Visually check each FRU for damage. Replace any damaged FRU.
3. Remove or disconnect all of the following devices:
   a. Non-ThinkPad devices
   b. Devices attached to the port replicator
   c. Printer, mouse, and other external devices
   d. Battery pack
   e. Hard disk drive
   f. External diskette drive or optical drive
   g. DIMM
   h. Optical disk or diskette in the internal drive
   i. PC Cards
4. Turn on the computer.
5. Determine whether the problem has been solved.
6. If the problem does not recur, reconnect the removed devices one at a time until you find the failing FRU.
7. If the problem remains, replace the following FRUs one at a time (do not replace a nondefective FRU):
   a. System board
   b. LCD assembly

FRU replacement notices

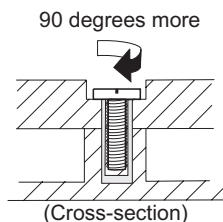
This section contains notices related to removing and replacing parts. Read this section carefully before replacing any FRU.

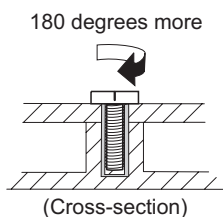
Screw notices

Loose screws can cause a reliability problem. In the ThinkPad computer, this problem is addressed with special nylon-coated screws that have the following characteristics:
- They maintain tight connections.
- They do not easily come loose, even with shock or vibration.
- They are harder to tighten.
- Each one should be used only once.

Do the following when you service this machine:
- Keep the screw kit (for the P/N, see "Miscellaneous parts" on page 255) in your tool bag.
- Always use new screws.
- Use a torque screwdriver if you have one.

Tighten screws as follows:
- **Plastic to plastic**

  Turn an additional **90 degrees** after the screw head touches the surface of the plastic part:

- **Logic card to plastic**

  Turn an additional **180 degrees** after the screw head touches the surface of the logic card:

- **Torque driver**

  If you have a torque driver, refer to the "Torque" column for each step.
- Make sure that you use the correct screw. If you have a torque screwdriver, tighten all screws firmly to the torque shown in the table. **Never use a screw that you removed. Use a new one. Make sure that all of the screws are tightened firmly.**
- Ensure torque screwdrivers are calibrated correctly following country specifications.

Retaining serial numbers

This section includes the following descriptions:
- "Restoring the serial number of the system unit" on page 55

- "Retaining the UUID"
- "Reading or writing the ECA information"

Restoring the serial number of the system unit

When the computer was manufactured, the EEPROM on the system board was loaded with the serial numbers of the system and all major components. These numbers need to remain the same throughout the life of the computer.

If you replace the system board, you must restore the serial number of the system unit to its original value.

Before replacing the system board, save the original serial number by doing the following:

1. Install the ThinkPad Hardware Maintenance Diskette Version 1.73 or later, and restart the computer.
2. From the main menu, select **1. Set System Identification**.
3. Select **2. Read S/N data from EEPROM**.

The serial number of each device in your computer is displayed; the serial number of the system unit is listed as follows:

- 20: Serial number

Write down that number.

Note: The serial number of the system unit is also written on the label attached to the bottom of the computer.

After you have replaced the system board, restore the serial number by doing the following:

1. Install the ThinkPad Hardware Maintenance Diskette Version 1.73 or later and restart the computer.
2. From the main menu, select **1. Set System Identification**.
3. Select **1. Add S/N data from EEPROM**.

   Follow the instructions on the screen.

Retaining the UUID

The Universally Unique Identifier (UUID) is a 128-bit number uniquely assigned to your computer at production and stored in the EEPROM of your system board. The algorithm that generates the number is designed to provide unique IDs until the year A.D. 3400. No two computers in the world have the same number.

When you replace the system board, you must set the UUID on the new system board as follows:

1. Install the ThinkPad Hardware Maintenance Diskette Version 1.73 or later, and restart the computer.
2. From the main menu, select **4. Assign UUID**.

   A new UUID is created and written. If a valid UUID already exists, it is not overwritten.

Reading or writing the ECA information

Information on Engineering Change Announcements (ECA) are stored in the EEPROM of the system board. The electronic storage of this information simplifies the procedure to check if the ECA has been previously applied to a machine. The machine does not need to be disassembled to check for the ECA application.

To check what ECAs have been previously applied to the machine, use the ECA Information Read/Write function on the ThinkPad Hardware Maintenance Diskette Version 1.73 or later.

1. Insert the ThinkPad Hardware Maintenance Diskette Version 1.73 or later, and restart the computer.
2. From the main menu, select **6. Set ECA Information**.
3. To read ECA information, select **2. Read ECA/rework number from EEPROM** and follow the instruction.
4. To read box build date, select **5. Read box build date from EEPROM**, and follow the instruction on the screen.

After an ECA has been applied to the machine, the EEPROM must be updated to reflect the ECA's application. Use the ThinkPad Hardware Maintenance Diskette Version 1.73 or later to update the EEPROM.

Note: Only the ECA number is stored in the EEPROM. The machine type of the ECA is assumed be the same as the machine type of the machine that had the ECA applied to it.

1. Insert the ThinkPad Hardware Maintenance Diskette Version 1.73 or later, and restart the computer.
2. From the main menu, select **6. Set ECA Information**.
3. To write ECA information, select **1. Write ECA/rework number from EEPROM**, and follow the instruction.
4. To write box build date, select **4. Write box build date from EEPROM**, and follow the instruction on the screen.

If the system board is being replaced, try to read the ECA information from the old system board and transfer the information to the new system. If the system board is inoperable, this will not be possible.

Removing and replacing a FRU

This section presents directions and drawings for use in removing and replacing a FRU. Be sure to observe the following general rules:

1. Do not try to service any computer unless you have been trained and certified. An untrained person runs the risk of damaging parts.
2. Before replacing any FRU, review “FRU replacement notices” on page 54.
3. Begin by removing any FRUs that have to be removed before the failing FRU. Any such FRUs are listed at the top of the page. Remove them in the order in which they are listed.
4. Follow the correct sequence in the steps for removing the FRU, as given in the drawings by the numbers in square callouts.
5. When turning a screw to replace a FRU, turn it in the direction as given by the arrow in the drawing.
6. When removing the FRU, move it in the direction as given by the arrow in the drawing.
7. To put the new FRU in place, reverse the removal procedure and follow any notes that pertain to replacement. For information about connecting and arranging internal cables, see “Locations” on page 114.
8. When replacing a FRU, use the correct screw as shown in the procedures.

⚠ **DANGER**

Before removing any FRU, turn off the computer, unplug all power cords from electrical outlets, remove the battery pack, and then disconnect any interconnecting cables.

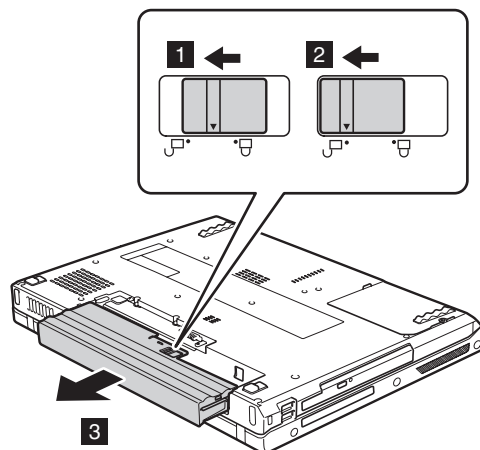
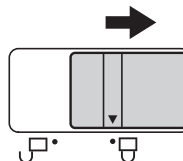
Attention: After replacing a FRU, do not turn on the computer until you have made sure that all screws, springs, and other small parts are in place and none are loose inside the computer. Verify this by shaking the computer gently and listening for rattling sounds. Metallic parts or metal flakes can cause electrical short circuits.

Attention: The system board is sensitive to, and can be damaged by, electrostatic discharge. Before touching it, establish personal grounding by touching a ground point with one hand or by using an electrostatic discharge (ESD) strap (P/N 6405959).

1010 Battery pack

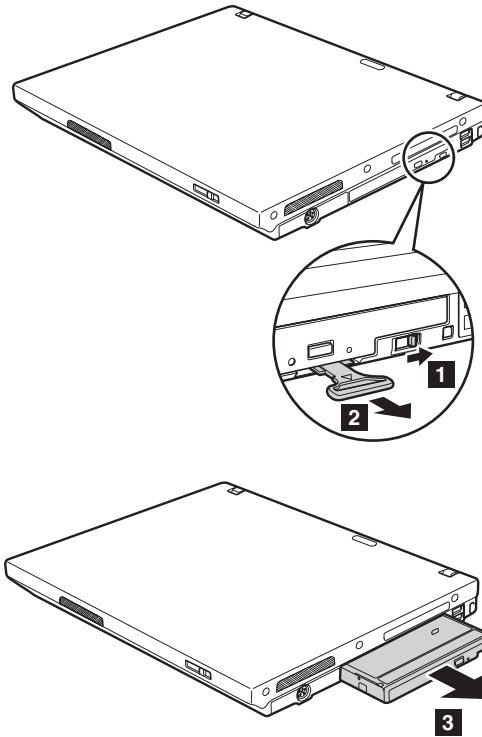
⚠ **DANGER**

Use only the battery specified in the parts list for your computer. Any other battery could ignite or explode.

Unlock the battery release lever **1**. Holding the battery release lever in the unlocked position **2**, remove the battery pack in the direction shown by arrow **3**.

When installing: Install the battery pack along the slide rails of the slot. Then make sure that the battery release lever is in the locked position as in this figure.

1020 Ultrabay Enhanced device for R60, R61, and R61i

Note

Ultrabay Enhanced does not accept any of the following devices:
- Ultrabay Plus™ devices
- Ultrabay 2000™ devices

When you release the switch in step 1, the lever pops out. In step 2, pull the lever a little to release the device from the bay.

1030 Hard disk drive cover, hard disk drive, and hard disk drive rubber rails

For access, remove this FRU:
- "1010 Battery pack" on page 58

Attention

- **Do not drop the hard disk drive or apply any physical shock to it.** The hard disk drive is sensitive to physical shock. Improper handling can cause damage and permanent loss of data.
- Before removing the drive, have the user make a backup copy of all the information on it if possible.
- Never remove the drive while the system is operating or is in suspend mode.

For 14.1-in. LCD models:

Step	Screw (quantity)	Color	Torque
1	M3 × 3 mm, flat-head, nylon-coated (1)	Black	0.491 Nm (5 kgfcm)

(continued)

When installing: Make sure that the hard disk drive connector is attached firmly.

When installing: Rubber rails of the hard disk drive must be attached to the replacement drive. Otherwise the hard disk drive cannot be properly installed to the computer.

For 15.0-in. LCD models:

Step	Screw (quantity)	Color	Torque
1	M3 × 3 mm, flat-head, nylon-coated (1)	Black	0.491 Nm (5 kgfcm)

(continued)

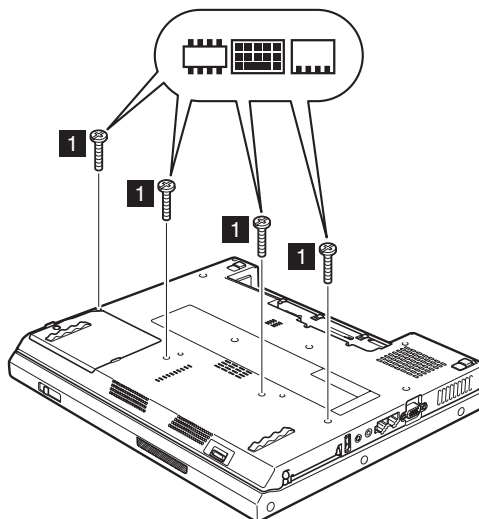
When installing: Make sure that the hard disk drive connector is attached firmly.

When installing: Rubber rails of the hard disk drive must be attached to the replacement drive. Otherwise the hard disk drive cannot be properly installed to the computer.

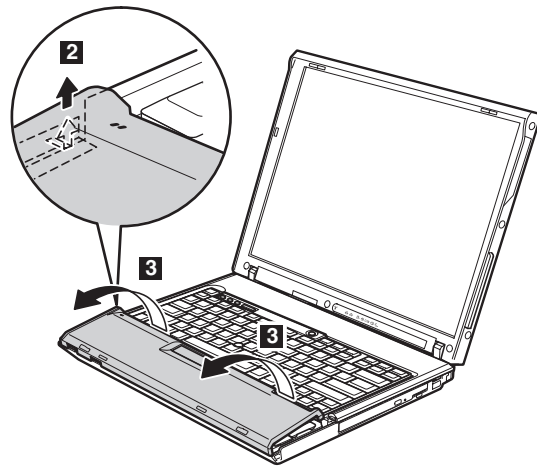
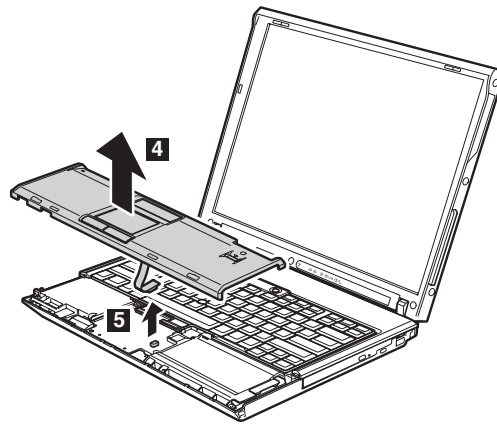
1040 Palm rest or palm rest with fingerprint reader

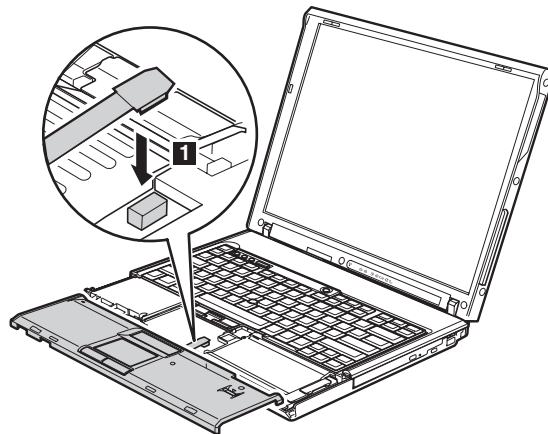
For access, remove this FRU in order:
- "1010 Battery pack" on page 58

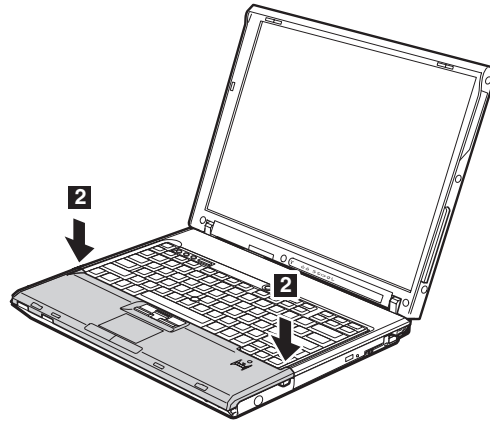
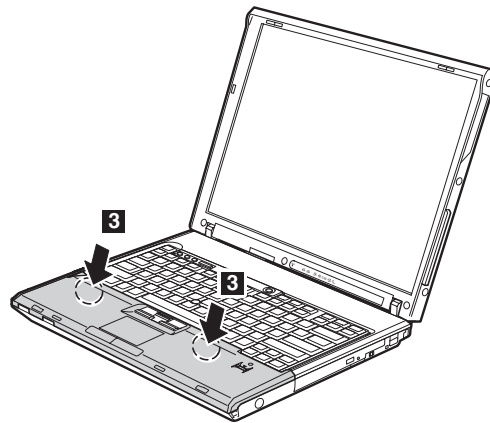
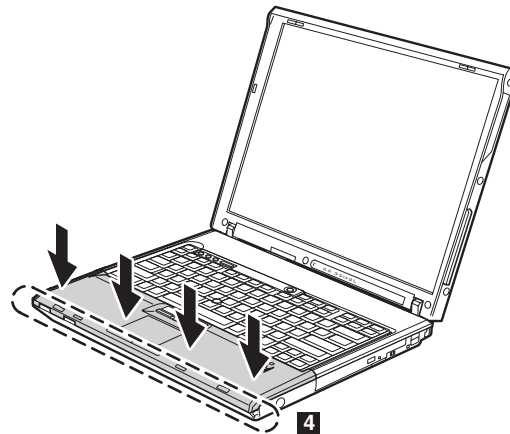
Notes

In models with the fingerprint reader, the sensor has been attached to the palm rest FRU as the child part. If the fingerprint reader has any defects and needs to be replaced, you need to replace the palm rest by the procedures given in this section. These procedures are the same for a palm rest with or without a fingerprint reader.

Step	Icon	Screw (quantity)	Color	Torque
1		M2 × 17 mm, flat-head, nylon-coated (4)	Black	0.167 Nm (1.7 kgfcm)

(continued)

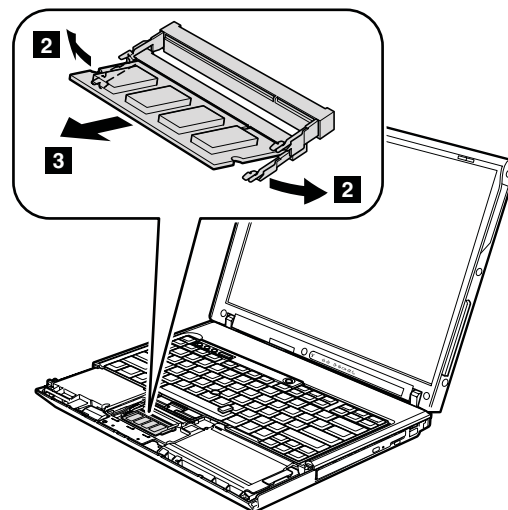
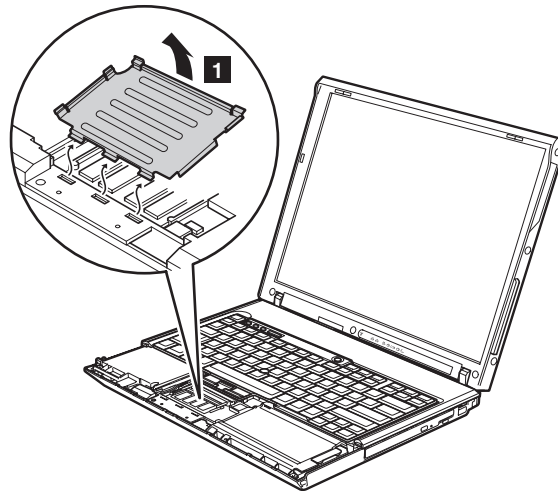
Lift the left edge of the palm rest a little in the direction shown by arrow **2**, and then lift the palm rest from the computer in the direction shown by arrow **3**.

Note: Step **4** and **5** are for R60, R61, and R61i (some models).

When installing:

1. Attach the touch pad connector to the system board firmly.

Note: Make sure that the connector is attached as in the figure above.
(continued)

2. Align the right and left top edges **2** of the palm rest.

3. Push gently on the area marked in this figure, in the direction shown by arrow **3**, until you hear a click.

4. Push the front side of the palm rest **4** until it clicks into place.

5. Close the LCD cover and turn the computer over. Then fasten the four screws to secure the palm rest.

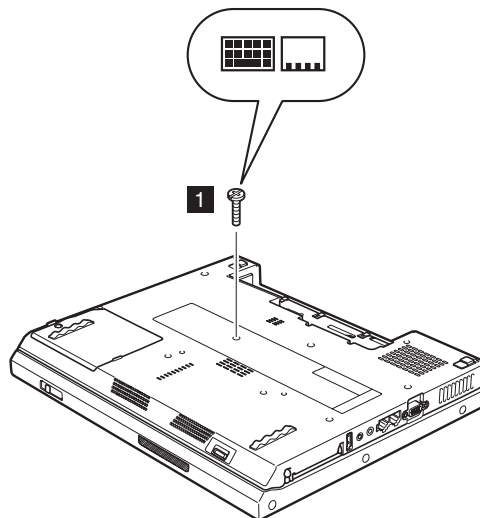
1050 DIMM and DIMM cover

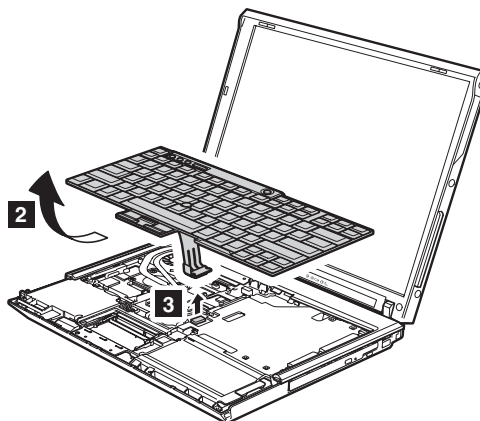
For access, remove these FRUs in order:

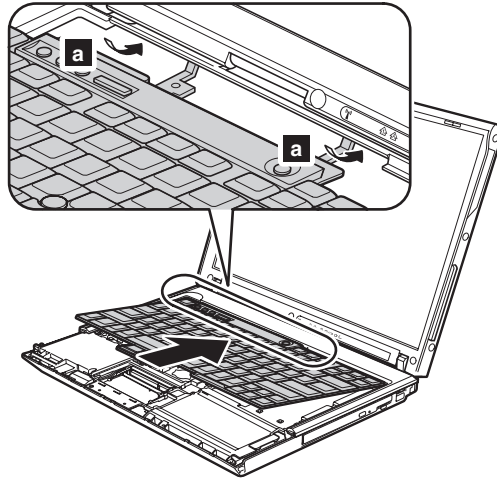
- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64

When installing: Insert the notched end of the DIMM into the socket. Press the DIMM firmly, and pivot it until it snaps into the place. Make sure that it is firmly fixed in the slot and does not move easily.

1060 Keyboard

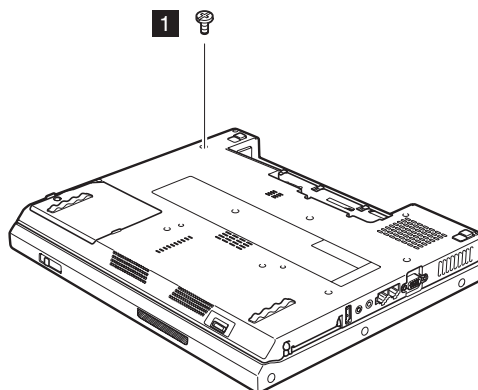
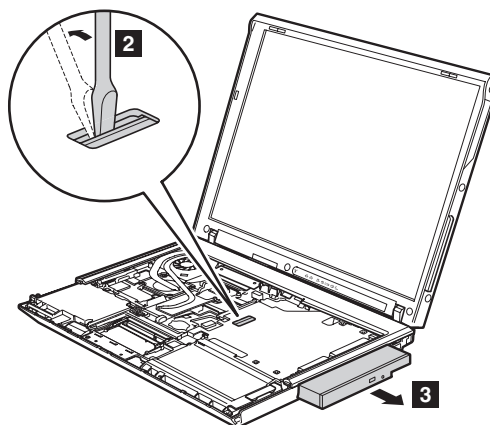
For access, remove these FRUs in order:

- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64

Step	Icon	Screw (quantity)	Color	Torque
1		M2 × 17 mm, flat-head, nylon-coated (1)	Black	0.167 Nm (1.7 kgfcm)

Lift the keyboard a little in the direction shown by arrow 2, and then detach the connector 3.

(continued)

When installing: Make sure that the keyboard edges **a** are under the frame as shown in this figure.

1070 Optical drive for R60e and R61i

For access, remove these FRUs in order:

- “1010 Battery pack” on page 58
- “1040 Palm rest or palm rest with fingerprint reader” on page 64
- “1060 Keyboard” on page 68

Step	Screw (quantity)	Color	Torque
1	M3 × 6 mm, flat-head, nylon-coated (1)	Black	0.491 Nm (5 kgfcm)

Push the optical drive by using a screwdriver **2** as shown in this figure. Then pull out the optical drive **3**.

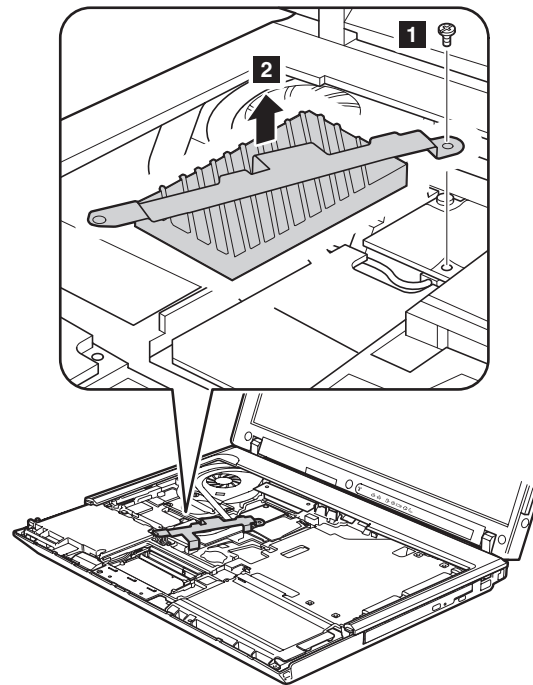
1080 Heat sink plate and Modem daughter card (MDC-1.5)

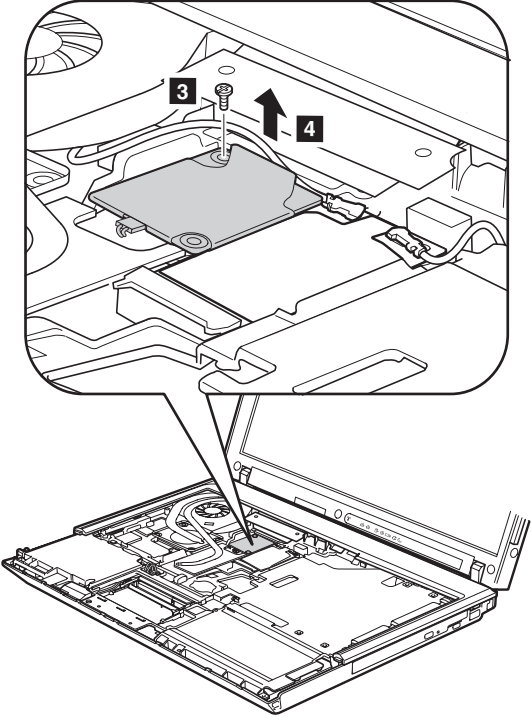
For access, remove these FRUs in order:
- “1010 Battery pack” on page 58
- “1040 Palm rest or palm rest with fingerprint reader” on page 64
- “1060 Keyboard” on page 68

For models without a heat sink plate:

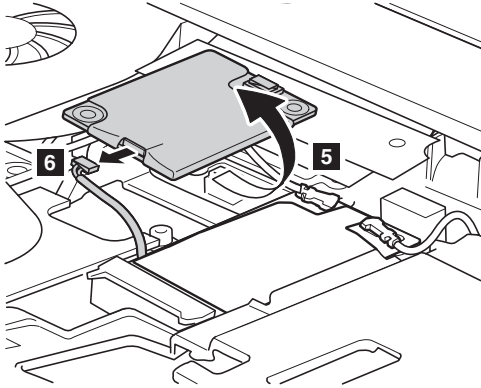
Step	Screw (quantity)	Color	Torque
1	M2 × 3.5 mm, small-head, nylon-coated (1)	Silver	0.167 Nm (1.7 kgfcm)

(continued)

For models with a heat sink plate:

Step	Screw (quantity)	Color	Torque
1	M2 × 3.5 mm, small-head, nylon-coated (1)	Silver	0.167 Nm (1.7 kgfcm)

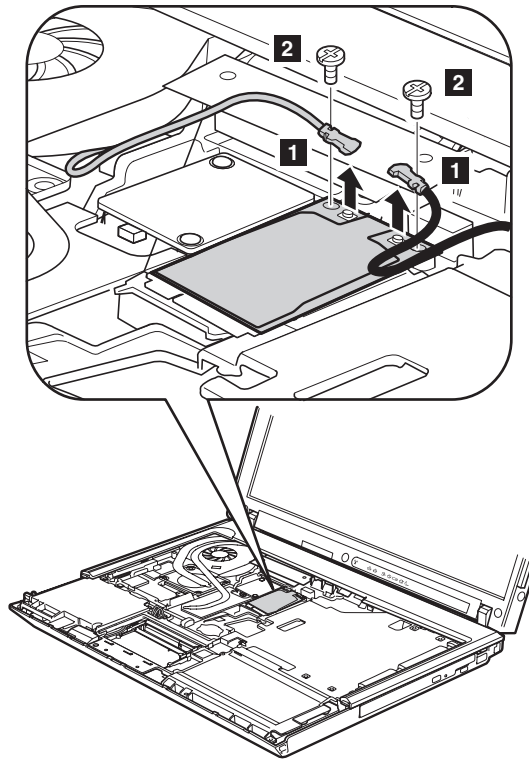
(continued)

Step	Screw (quantity)	Color	Torque
3	M2 × 3.5 mm, small-head, nylon-coated (1)	Silver	0.167 Nm (1.7 kgfcm)

In step 4, remove the card by pulling the tab with your fingers in the direction shown by the arrow.

Turn the card over 5, and detach the modem connector 6.

When installing: Make sure that the modem connector and the connector on the underside of the card are attached firmly.

1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN

For access, remove these FRUs in order:
- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68

In step **1**, unplug the jacks by using the removal tool antenna RF connector (P/N: 08K7159) or pick the connectors with your fingers and gently unplug them in direction of the arrow.

Step	Screw (quantity)	Color	Torque
2	M2 × 3.5 mm, small-head, nylon-coated (2)	Silver	0.167 Nm (1.7 kgfcm)

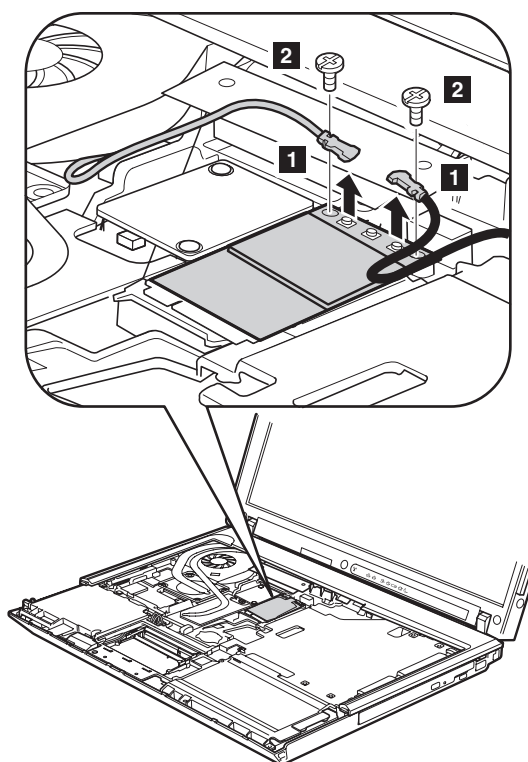
When installing: Plug the gray cable into the jack labeled **MAIN** on the card, and the black cable into the jack labeled **AUX**.

(continued)

3

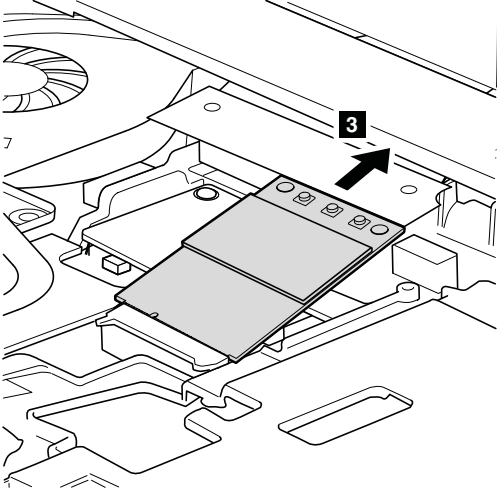
1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN

For access, remove these FRUs in order:
- “1010 Battery pack” on page 58
- “1040 Palm rest or palm rest with fingerprint reader” on page 64
- “1060 Keyboard” on page 68

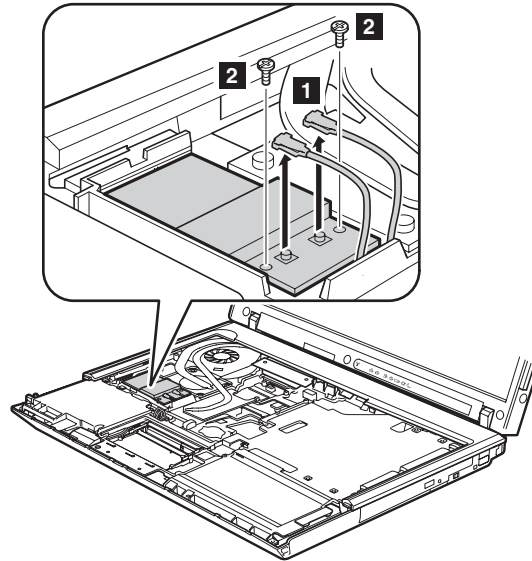
In step **1**, unplug the jacks by using the removal tool antenna RF connector (P/N: 08K7159) or pick the connectors with your fingers and gently unplug them in direction of the arrow.

Step	Screw (quantity)	Color	Torque
2	M2 × 3.5 mm, small-head, nylon-coated (2)	Silver	0.167 Nm (1.7 kgfcm)

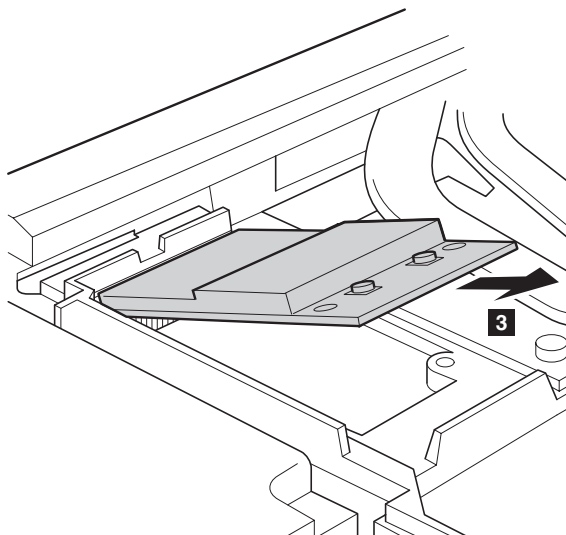
When installing: Plug the gray cable (MAIN) into the jack labeled **TR1** on the card, and the black cable (AUX) into the jack labeled **TR2**.

(continued)

3

1110 PCI Express Mini Card for wireless WAN for R60 and R61i

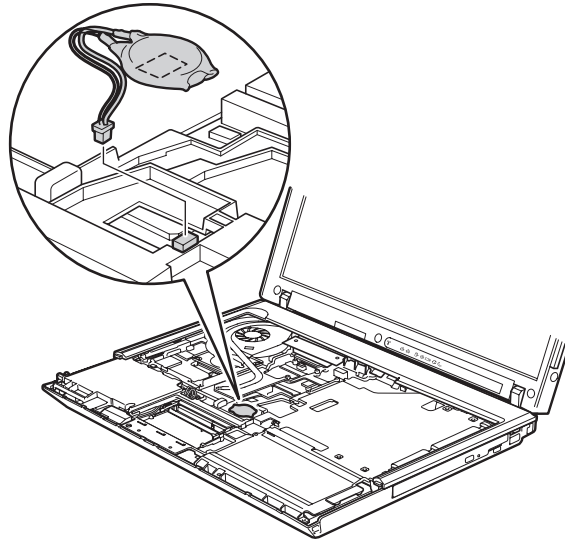
For access, remove these FRUs in order:
- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68

In step **1**, unplug the jacks by using the removal tool antenna RF connector (P/N: 08K7159) or pick the connectors with your fingers and gently unplug them in direction of the arrow.

Step	Screw (quantity)	Color	Torque
2	M2 × 10 mm, small-head, nylon-coated (2)	Black	0.167 Nm (1.7 kgfcm)

When installing: Plug the red cable into the jack labeled **MAIN** on the card, and the blue cable into the jack labeled **AUX**.

1120 Backup battery

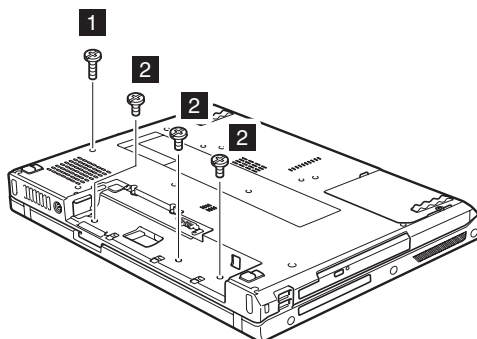
⚠ **DANGER**

Use only the battery specified in the parts list for your computer. Any other battery could ignite or explode.

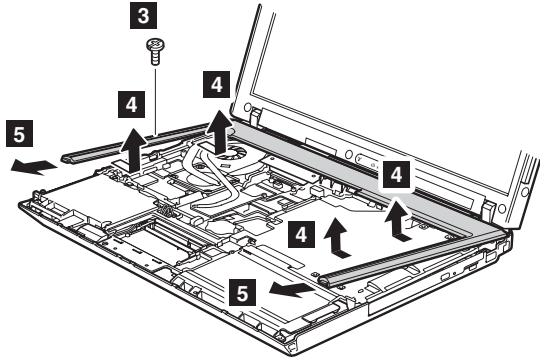
For access, remove these FRUs in order:
- “1010 Battery pack” on page 58
- “1040 Palm rest or palm rest with fingerprint reader” on page 64
- “1060 Keyboard” on page 68

When installing: Make sure that the battery connector is attached firmly.

1130 Keyboard bezel and wireless WAN antenna cable (AUX)

For access, remove these FRUs in order:
- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68
- "1110 PCI Express Mini Card for wireless WAN for R60 and R61i" on page 78

Note: The wireless WAN antenna cable (AUX) is attached to the keyboard bezel. To remove the wireless WAN antenna cable (AUX), remove the keyboard bezel first.

Note: Screw **1** is only for 15.0-in. LCD models.

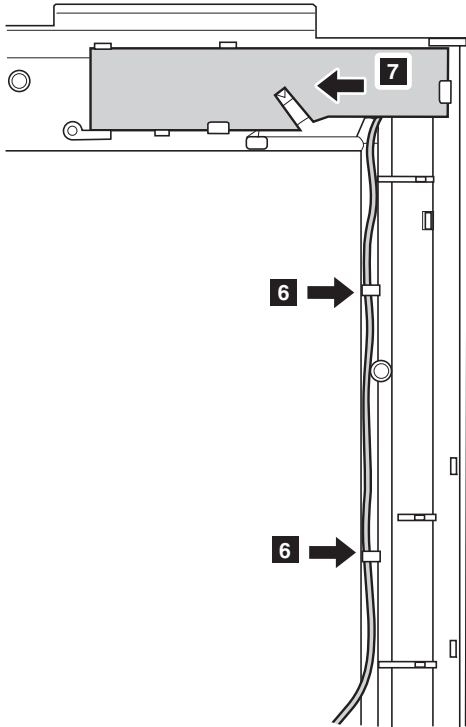
Step	Screw (quantity)	Color	Torque
1	M2 × 17 mm, flat-head, nylon-coated (1)	Black	0.167 Nm (1.7 kgfcm)
2	M2 × 2.5 mm, flat-head, nylon-coated (3)	Black	0.167 Nm (1.7 kgfcm)

(continued)

Note: Screw 3 is only for 14.1-in. LCD models.

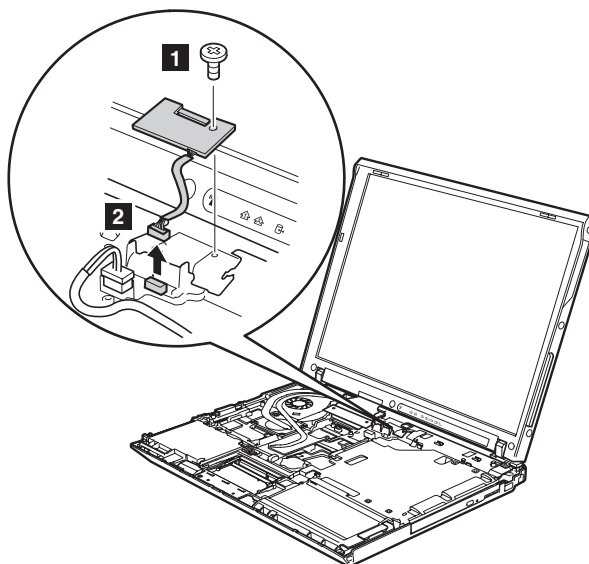
Step	Screw (quantity)	Color	Torque
3	M2 × 14 mm, flat-head, nylon-coated (1)	Silver	0.167 Nm (1.7 kgfcm)

In step 4, detach the claws. Then remove the keyboard bezel in the direction shown by arrow 5.

When installing: Make sure that all the claws are attached firmly. Then fasten the screws to secure the keyboard bezel.

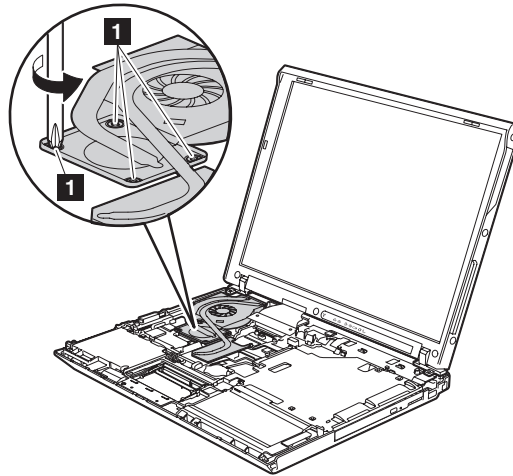
Note: Step 6 and 7 are only for the wireless WAN antenna cable (AUX).

When installing: Make sure that the antenna cable is routed along the cable guides.

1140 SIM card slot

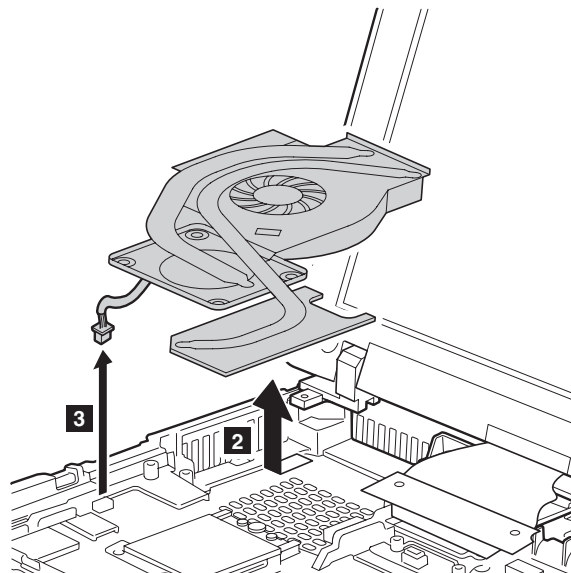
For access, remove this FRU:
- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68
- "1130 Keyboard bezel and wireless WAN antenna cable (AUX)" on page 80

Step	Screw (quantity)	Color	Torque
1	M2 × 2.5 mm, flat-head, nylon-coated (1)	Black	0.167 Nm (1.7 kgfcm)

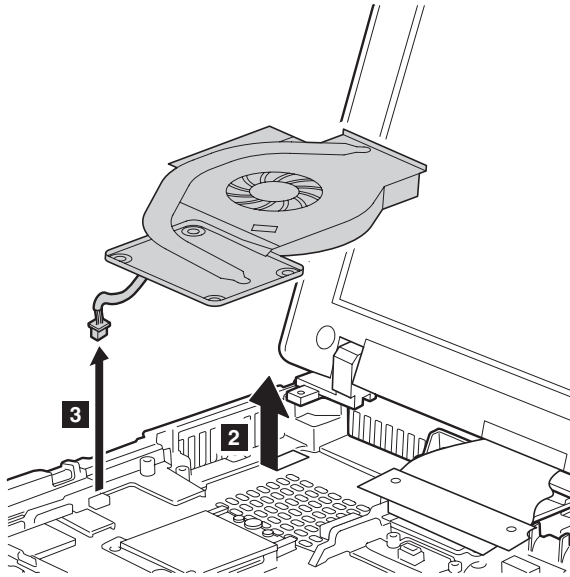
When installing: Make sure the connector 2 is attached firmly.

1150 Fan assembly

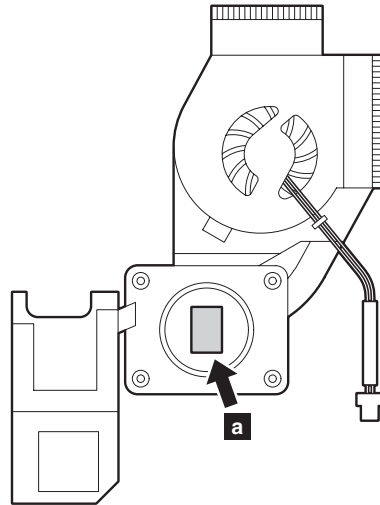
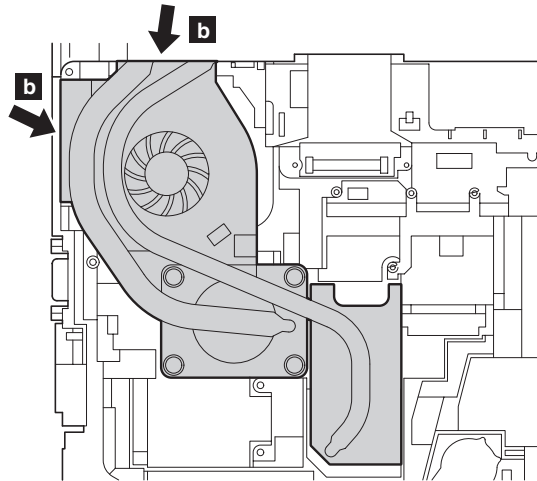
For access, remove these FRUs in order:
- “1010 Battery pack” on page 58
- “1040 Palm rest or palm rest with fingerprint reader” on page 64
- “1060 Keyboard” on page 68
- “1080 Heat sink plate and Modem daughter card (MDC-1.5)” on page 71
- “1130 Keyboard bezel and wireless WAN antenna cable (AUX)” on page 80

In step 1, loosen the screws.

Attention: Do not handle the fan roughly. Improper handling of the fan can cause distortion or deformation and imperfect contact with components.

For models without a heat sink plate:

(continued)

For models with a heat sink plate:

(continued)

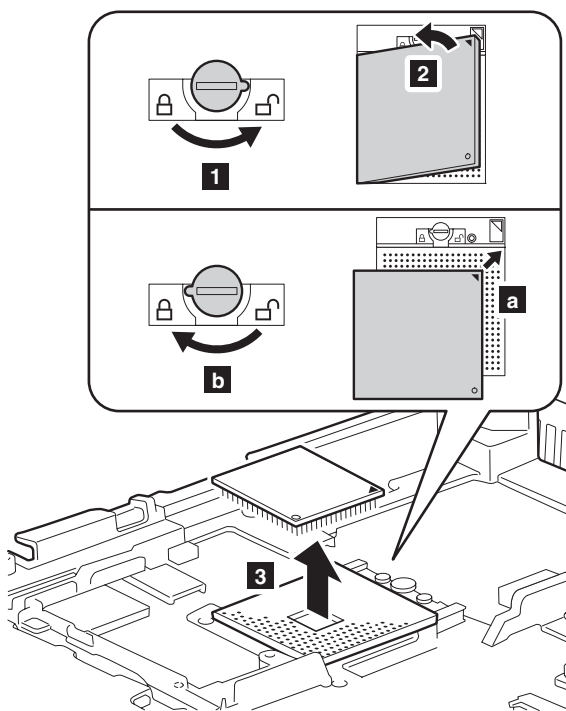
When installing:

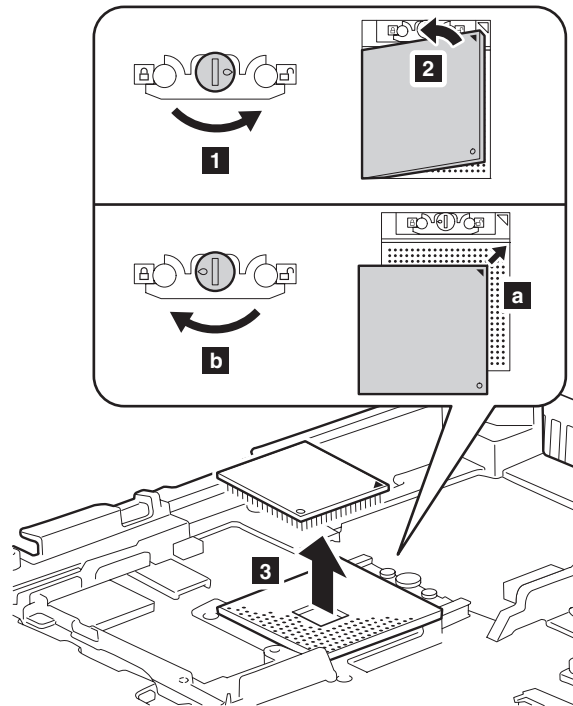
- Before you attach the fan assembly to the computer, apply thermal grease, at an amount of 0.2 grams, on the part marked **a** as in the following figure. Either too much or too less application of grease can cause a thermal problem due to imperfect contact with a component.

- Make sure that the fan connector is attached firmly.
- When attaching the fan assembly to the frame, take care not to damage the heat sink (**b**) of the fan assembly.

1160 CPU

For access, remove these FRUs in order:
- “1010 Battery pack” on page 58
- “1040 Palm rest or palm rest with fingerprint reader” on page 64
- “1060 Keyboard” on page 68
- “1080 Heat sink plate and Modem daughter card (MDC-1.5)” on page 71
- “1130 Keyboard bezel and wireless WAN antenna cable (AUX)” on page 80
- “1150 Fan assembly” on page 83

Attention: CPU is extremely sensitive. When you service the CPU, avoid any kind of rough handling.

Rotate the head of the screw in the direction shown by arrow **1** to release the lock; then remove the CPU.

For R60 and R61i (some models):

(continued)

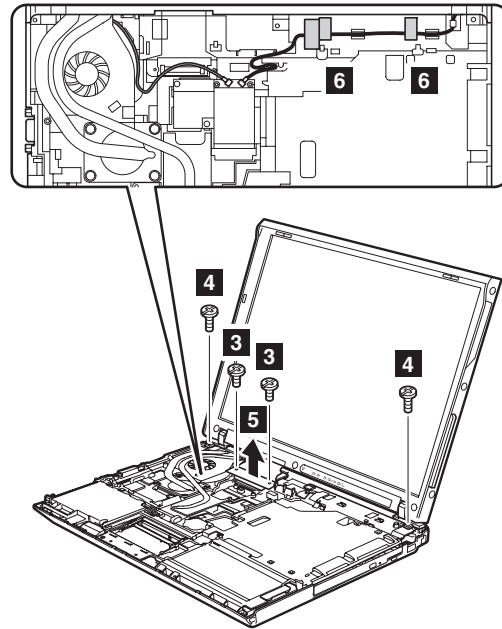
For R60e, R61, and R61i (some models):

When installing: Place the CPU on the CPU socket **a**, and then rotate the head of the screw in the direction shown by arrow **b** to secure the CPU.

1170 LCD assembly

For access, remove these FRUs in order:

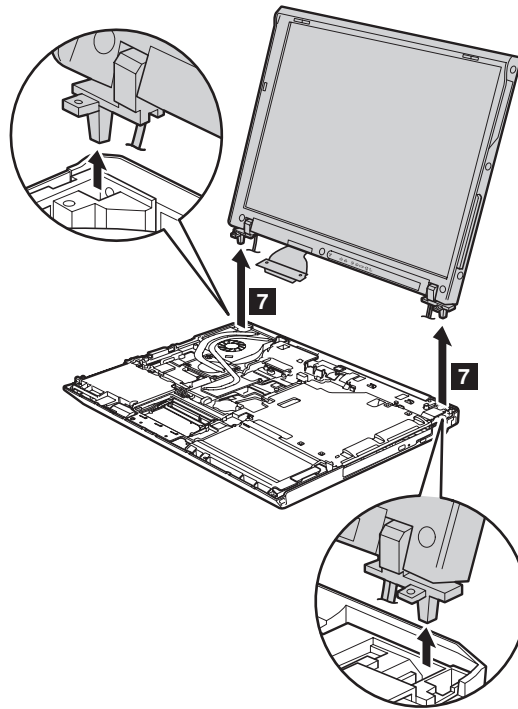
- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68
- "1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN" on page 74
- "1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN" on page 76
- "1110 PCI Express Mini Card for wireless WAN for R60 and R61i" on page 78
- "1130 Keyboard bezel and wireless WAN antenna cable (AUX)" on page 80

Step	Screw cap	Screw (quantity)	Color	Torque
1		M2.5 × 6 mm, flat-head, nylon-coated (2)	Black	0.392 Nm (4 kgfcm)
2	—	M2.5 × 6 mm, flat-head, nylon-coated (2)	Black	0.392 Nm (4 kgfcm)

(continued)

Step	Screw (quantity)	Color	Torque
3	M2 × 3.5 mm, small-head, nylon-coated (2)	Silver	0.167 Nm (1.7 kgfcm)
4	M2.5 × 6 mm, flat-head, nylon-coated (2)	Black	0.392 Nm (4 kgfcm)

In step 6, strip off the tapes securing the antenna cables, and release the cables from the cable guides of the frame.

When installing: Do not pinch the antenna cables when you attach the LCD connector.

(continued)

When installing:

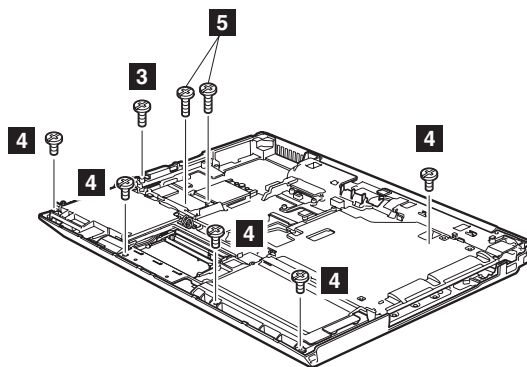
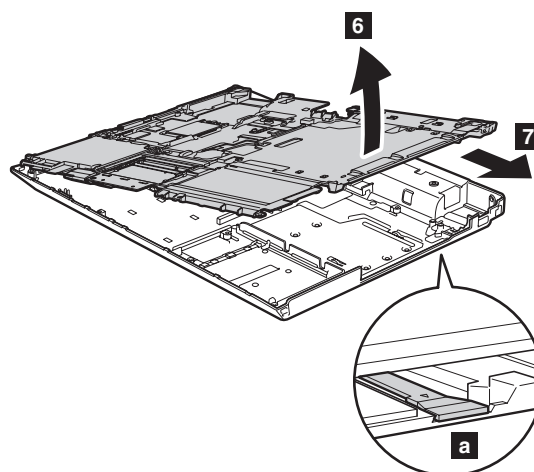
1. Route the antenna cables along the cable guides and secure them with the tapes. When you route the cables, do not tense them. To do so, the cables may get damaged by the cable guides of the frame, and may cause a broken wire.
2. Make sure that the LCD connector is attached firmly.

1180 Base cover

For access, remove these FRUs, in order:

- “1010 Battery pack” on page 58
- “1020 Ultrabay Enhanced device for R60, R61, and R61i” on page 59
- “1030 Hard disk drive cover, hard disk drive, and hard disk drive rubber rails” on page 60
- “1040 Palm rest or palm rest with fingerprint reader” on page 64
- “1060 Keyboard” on page 68
- “1070 Optical drive for R60e and R61i” on page 70
- “1080 Heat sink plate and Modem daughter card (MDC-1.5)” on page 71
- “1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN” on page 74
- “1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN” on page 76
- “1110 PCI Express Mini Card for wireless WAN for R60 and R61i” on page 78
- “1130 Keyboard bezel and wireless WAN antenna cable (AUX)” on page 80
- “1140 SIM card slot” on page 82
- “1150 Fan assembly” on page 83
- “1170 LCD assembly” on page 88

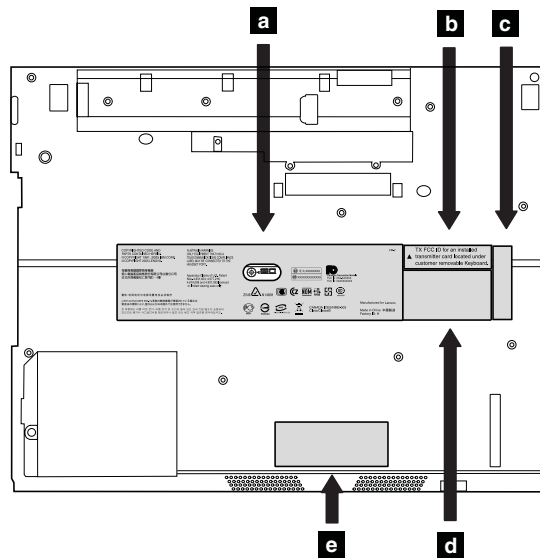
Step	Screw (quantity)	Color	Torque
1	M2 × 3.5 mm, big flat-head, nylon-coated (1)	Black	0.167 Nm (1.7 kgfcm)
2	M2 × 5 mm, flat-head, nylon-coated (4)	Black	0.167 Nm (1.7 kgfcm)

(continued)

Step	Screw (quantity)	Color	Torque
3	M2 × 17 mm, flat-head, nylon-coated (1)	Black	0.167 Nm (1.7 kgfcm)
4	M2 × 3.5 mm, small-head, nylon-coated (5)	Silver	0.167 Nm (1.7 kgfcm)
5	M2 × 10 mm, flat-head, nylon-coated (2)	Black	0.167 Nm (1.7 kgfcm)

Attention: Before step 7, be sure that the Ultrabay Enhanced device eject lever is not popped out and it is housed in its position properly as shown in the figure a.

Note: Applying labels to the base cover

When you replace the base cover, you need to stick some labels on the new base cover. Some of the labels have been shipped with the new base cover, and some may need to be reused from the old base cover.

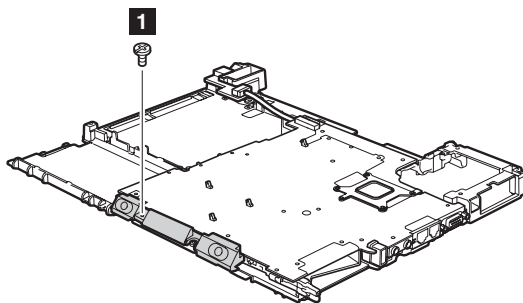
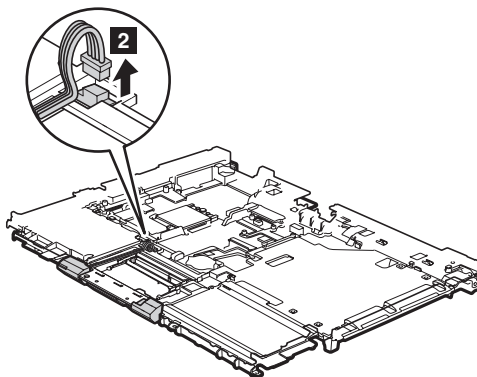
Following labels are the typical labels stuck on the bottom side of the computer when it is shipped.

- **a** FCC or homologation label
- **b** FCC label
- **c** FCC label for the wireless WAN
- **d** Product label
- **e** Windows license label (COA)

For some models, you also need to apply one or two FCC labels or the other types of labels. Check the old base cover; if it has one or two FCC labels or the other types of labels, find duplicates of them in the package and apply them to the new base cover.

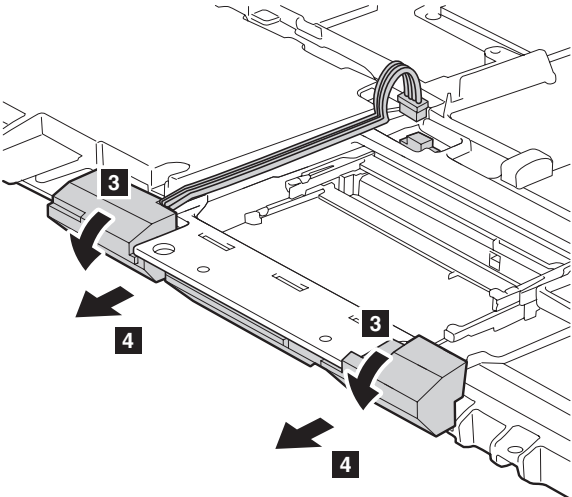
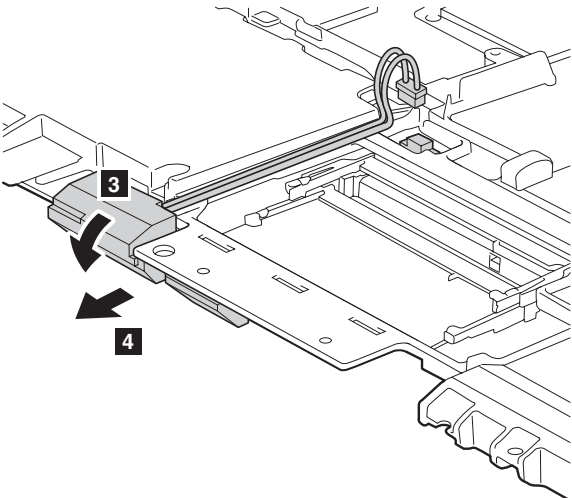
1190 Speaker assembly

For access, remove these FRUs in order:

- “1010 Battery pack” on page 58
- “1020 Ultrabay Enhanced device for R60, R61, and R61i” on page 59
- “1030 Hard disk drive cover, hard disk drive, and hard disk drive rubber rails” on page 60
- “1040 Palm rest or palm rest with fingerprint reader” on page 64
- “1060 Keyboard” on page 68
- “1070 Optical drive for R60e and R61i” on page 70
- “1080 Heat sink plate and Modem daughter card (MDC-1.5)” on page 71
- “1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN” on page 74
- “1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN” on page 76
- “1110 PCI Express Mini Card for wireless WAN for R60 and R61i” on page 78
- “1130 Keyboard bezel and wireless WAN antenna cable (AUX)” on page 80
- “1140 SIM card slot” on page 82
- “1150 Fan assembly” on page 83
- “1170 LCD assembly” on page 88
- “1180 Base cover” on page 91

Note: Step **1** is for R60, R61, and R61i (some models).

Step	Screw (quantity)	Color	Torque
1	M2 × 3.5 mm, small-head, nylon-coated (1)	Silver	0.167 Nm (1.7 kgfcm)

When installing: Make sure that the speaker connector is attached firmly.

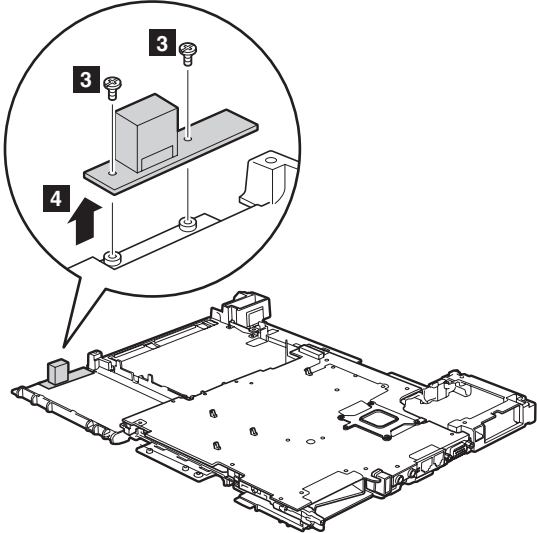
(continued)

For R60, R61, and R61i (some models):

For R60e and R61i (some models):

1200 Video connector sub card and FFC cable for 15.0-in. LCD models in R60, R61, and R61i

For access, remove these FRUs, in order:

- "1010 Battery pack" on page 58
- "1020 Ultrabay Enhanced device for R60, R61, and R61i" on page 59
- "1030 Hard disk drive cover, hard disk drive, and hard disk drive rubber rails" on page 60
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68
- "1070 Optical drive for R60e and R61i" on page 70
- "1080 Heat sink plate and Modem daughter card (MDC-1.5)" on page 71
- "1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN" on page 74
- "1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN" on page 76
- "1110 PCI Express Mini Card for wireless WAN for R60 and R61i" on page 78
- "1130 Keyboard bezel and wireless WAN antenna cable (AUX)" on page 80
- "1140 SIM card slot" on page 82
- "1150 Fan assembly" on page 83
- "1170 LCD assembly" on page 88
- "1180 Base cover" on page 91

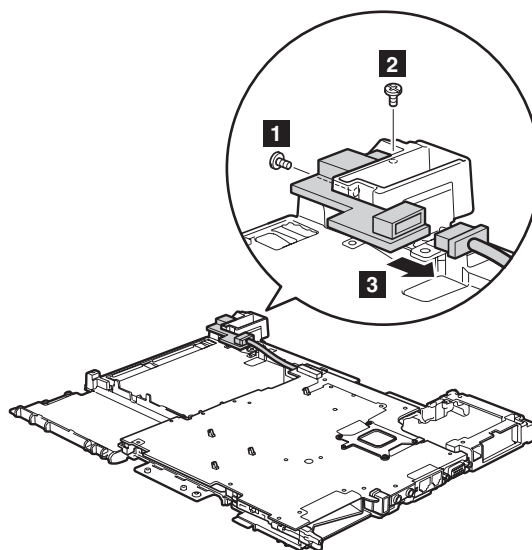
(continued)

Turn over the structure frame and proceed to step **3**.

Step	Screw (quantity)	Color	Torque
3	M2 × 3.5 mm, small-head, nylon-coated (2)	Silver	0.167 Nm (1.7 kgfcm)

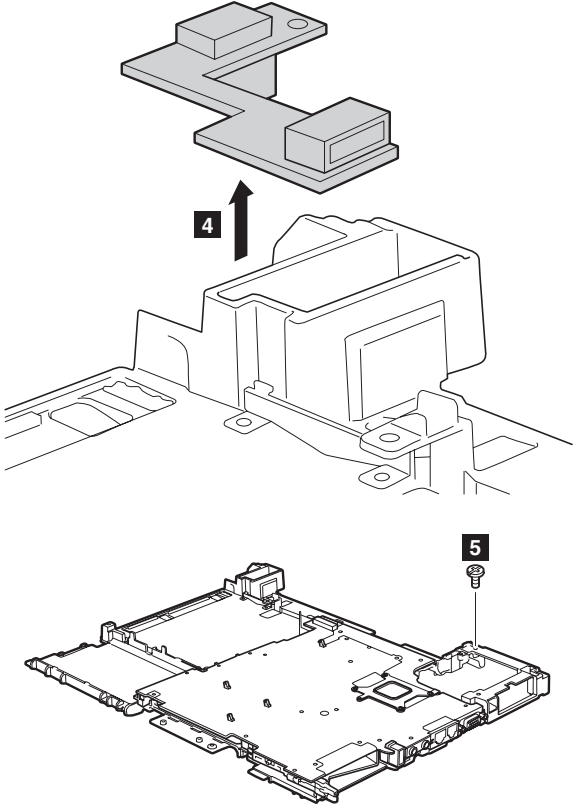
1210 Structure frame and IEEE1394 cable

For access, remove these FRUs, in order:

- "1010 Battery pack" on page 58
- "1020 Ultrabay Enhanced device for R60, R61, and R61i" on page 59
- "1030 Hard disk drive cover, hard disk drive, and hard disk drive rubber rails" on page 60
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68
- "1070 Optical drive for R60e and R61i" on page 70
- "1080 Heat sink plate and Modem daughter card (MDC-1.5)" on page 71
- "1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN" on page 74
- "1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN" on page 76
- "1110 PCI Express Mini Card for wireless WAN for R60 and R61i" on page 78
- "1130 Keyboard bezel and wireless WAN antenna cable (AUX)" on page 80
- "1140 SIM card slot" on page 82
- "1150 Fan assembly" on page 83
- "1170 LCD assembly" on page 88
- "1180 Base cover" on page 91

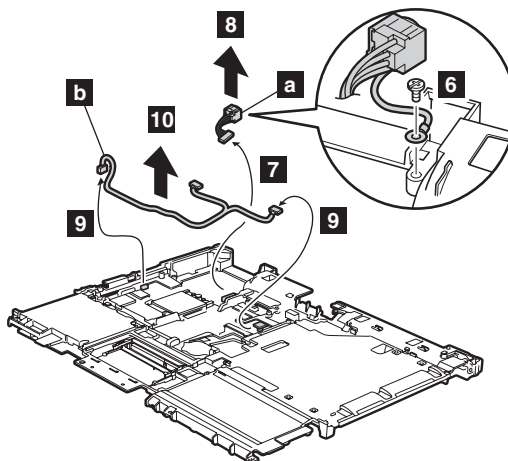
Remove the USB sub card with cable.

Step	Screw (quantity)	Color	Torque
1	M2 × 3.5 mm, small-head, nylon-coated (1)	Silver	0.167 Nm (1.7 kgfcm)
2	M2.5 × 6 mm, flat-head, nylon-coated (1)	Black	0.392 Nm (4 kgfcm)

In step 3, detach the connector and release the cable from the cable guide of the frame.

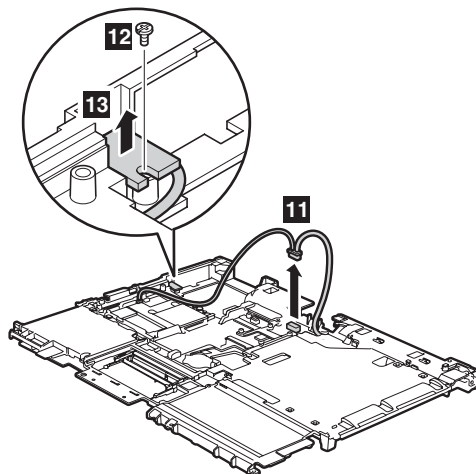
When installing: Make sure that the connector 3 is attached firmly.

(continued)

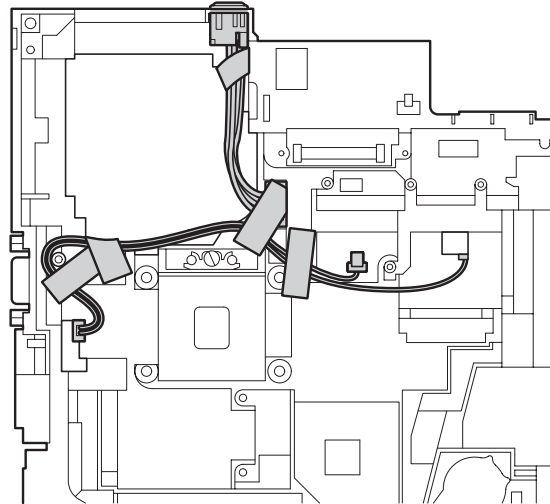
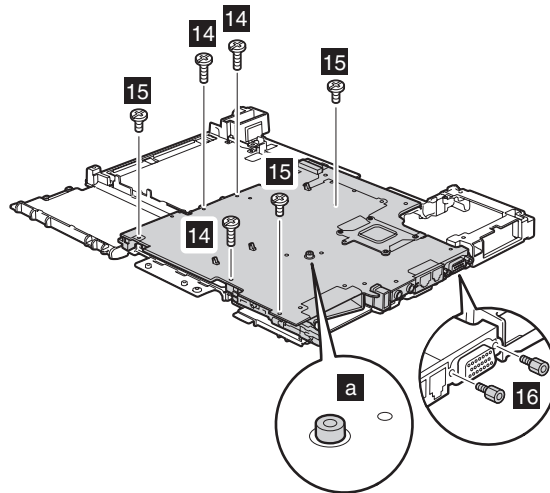
Step	Screw (quantity)	Color	Torque
5	M2 × 2.5 mm, flat-head, nylon-coated (1)	Black	0.167 Nm (1.7 kgfcm)

(continued)

Remove the ac power jack cable **a** and the modem cable **b**.

Step	Screw (quantity)	Color	Torque
6	M2 × 2.5 mm, flat-head, nylon-coated (1)	Black	0.167 Nm (1.7 kgfcm)

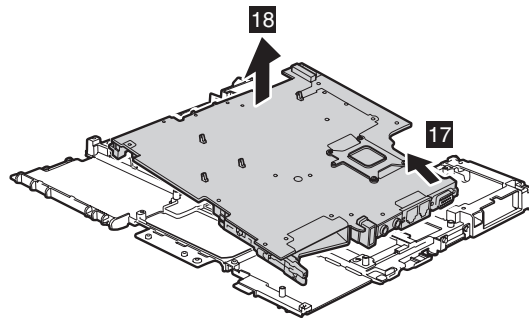
Remove the IEEE1394 cable.

Note: Step **12** and **13** are only for R60, R61, and R61i (some models).

Step	Screw (quantity)	Color	Torque
12	M2.5 × 6 mm, flat-head, nylon-coated (1)	Black	0.392 Nm (4 kgfcm)

(continued)

When installing: Make sure the connectors are attached firmly, and that the cables are routed as in the figure above.

Step	Screw (quantity)	Color	Torque
14	M2 × 10 mm, flat-head, nylon-coated (3)	Black	0.167 Nm (1.7 kgfcm)
15	M2 × 3.5 mm, big flat-head, nylon-coated (3)	Black	0.167 Nm (1.7 kgfcm)
16	Hex stud (2)	Silver	0.392 Nm (4 kgfcm)

When installing: When attaching the system board to the frame, adjust the placement with the small projection **a**. Then secure the system board with the screws.

(continued)

Remove the system board, and the PC Card/ExpressCard slots assembly from the structure frame together.

1220 System board and PC Card/ExpressCard slots assembly

For access, remove these FRUs, in order:
- "1010 Battery pack" on page 58
- "1020 Ultrabay Enhanced device for R60, R61, and R61i" on page 59
- "1030 Hard disk drive cover, hard disk drive, and hard disk drive rubber rails" on page 60
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68
- "1070 Optical drive for R60e and R61i" on page 70
- "1080 Heat sink plate and Modem daughter card (MDC-1.5)" on page 71
- "1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN" on page 74
- "1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN" on page 76
- "1110 PCI Express Mini Card for wireless WAN for R60 and R61i" on page 78
- "1130 Keyboard bezel and wireless WAN antenna cable (AUX)" on page 80
- "1140 SIM card slot" on page 82
- "1150 Fan assembly" on page 83
- "1170 LCD assembly" on page 88
- "1180 Base cover" on page 91
- "1210 Structure frame and IEEE1394 cable" on page 98

Important notices for handling the system board

When handling the system board, bear the following in mind.
- The system board has an accelerometer, which can be broken by applying several thousands of G-forces.

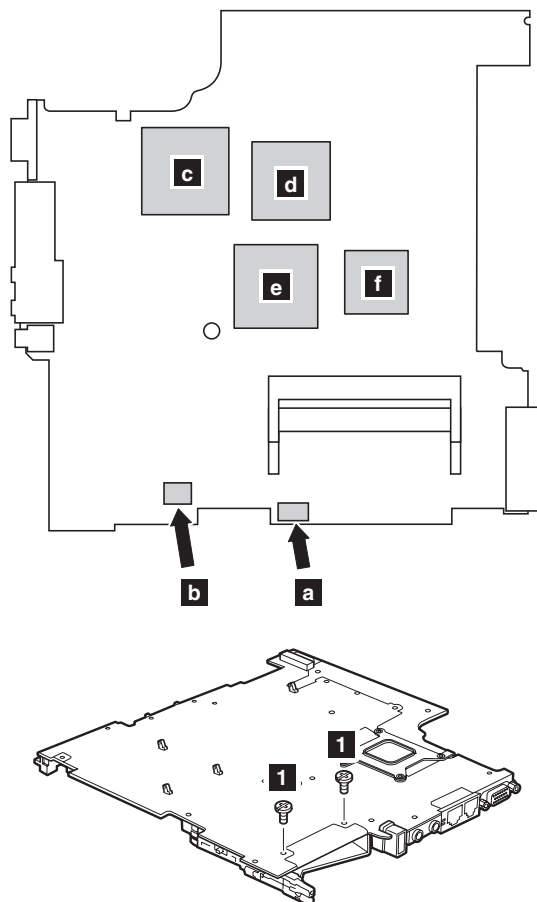
  Note: Dropping a system board from a height of as little as 6 inches so that it falls flat on a hard bench can subject the accelerometer to as much as 6,000 G's of shock.
- Be careful not to drop the system board on a bench top that has a hard surface, such as metal, wood, or composite.
- If a system board is dropped, you must test it, using PC-Doctor for DOS, to make sure that the HDD Active Protection still functions (see below).

  Note: If the test shows that HDD Active Protection is not functioning, be sure to document the drop in any reject report, and replace the system board.
- Avoid rough handling of any kind.
- At every point in the process, be sure not to drop or stack the system board.
- If you put a system board down, be sure to put it only on a padded surface such as an ESD mat or conductive corrugated material.

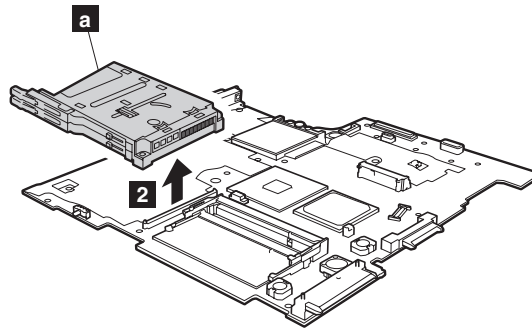
After replacing the system board, run PC-Doctor for DOS to make sure that HDD Active Protection still functions. The procedure is as follows:
1. Place the computer on a horizontal surface.
2. Run **Diagnostics** --> **ThinkPad Devices** --> **HDD Active Protection Test**.

   Attention: Do not apply physical shock to the computer while the test is running.

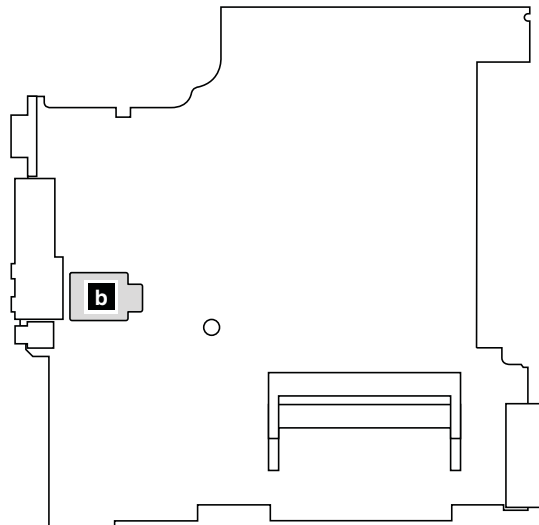
Following components soldered on the top side of the system board are extremely sensitive. When you service the system board, avoid any kind of rough handling.

- **a** Accelerometer chip for the HDD Active Protection System™
- **b** Security chip
- **c** CPU
- **d** Video chip
- **e** MCH (Memory Controller Hub)
- **f** ICH (I/O Controller Hub)

Step	Screw (quantity)	Color	Torque
1	M2 × 2.5 mm, flat-head, nylon-coated (2)	Black	0.167 Nm (1.7 kgfcm)

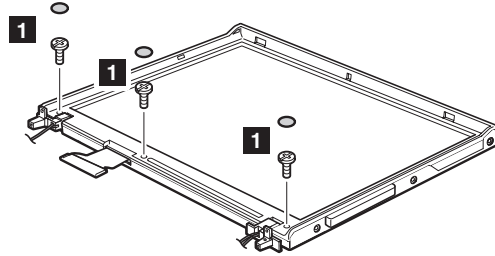
(continued)

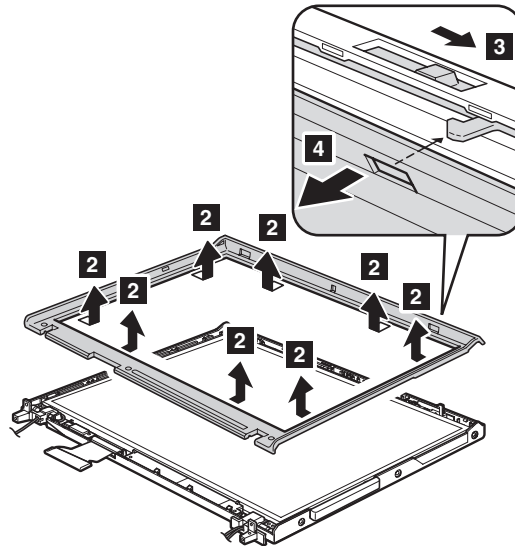
Turn over the system board, and then disconnect the PC Card/ExpressCard slots assembly **a** from the system board.

When installing:

1. Make sure that the connectors of PC Card/ExpressCard slots assembly are attached to the system board firmly.
2. When you attach the system board to the base cover, make sure that the wireless switch on the system board and the plastic housing in the base cover are in the same position (L or R). The wireless switch is fragile and might be damaged by the pushing force of the system board into the base cover.

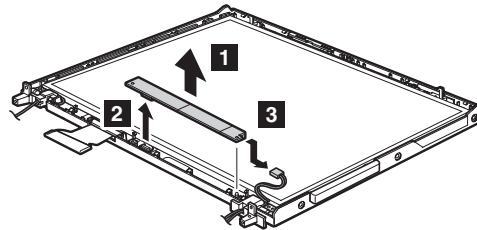
Installation for 15.0-in. LCD models in R60 and R61i (some models):
When replacing the system board, check the location of the wireless WAN card slot **b** on the old system board. If it has the CU tape, you need to apply the CU tape on the new system board.

2010 LCD front bezel

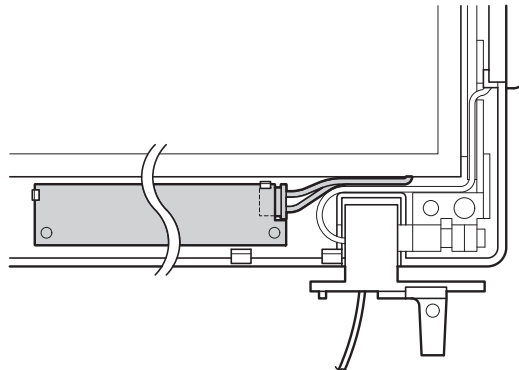
For access, remove this FRU:

- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68
- "1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN" on page 74
- "1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN" on page 76
- "1110 PCI Express Mini Card for wireless WAN for R60 and R61i" on page 78
- "1130 Keyboard bezel and wireless WAN antenna cable (AUX)" on page 80
- "1170 LCD assembly" on page 88

Step	Screw cap	Screw (quantity)	Color	Torque
1		M2.5 × 6 mm, flat-head, nylon-coated (3)	Black	0.392 Nm (4 kgfcm)

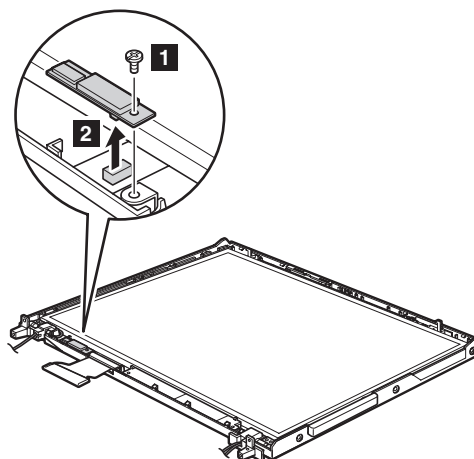
In step 3, while sliding the LCD latch lever in the direction shown by the arrow, remove the bezel in the direction shown by arrow 4.

2020 Inverter card

For access, remove these FRUs in order:

- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68
- "1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN" on page 74
- "1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN" on page 76
- "1110 PCI Express Mini Card for wireless WAN for R60 and R61i" on page 78
- "1130 Keyboard bezel and wireless WAN antenna cable (AUX)" on page 80
- "1170 LCD assembly" on page 88
- "2010 LCD front bezel" on page 106

When installing: Make sure that connectors **2** and **3** are attached firmly.

Cable routing: When replacing the inverter card, route the connector cable as in this figure:

2030 *Bluetooth* daughter card (BDC-2)

For access, remove these FRUs in order:

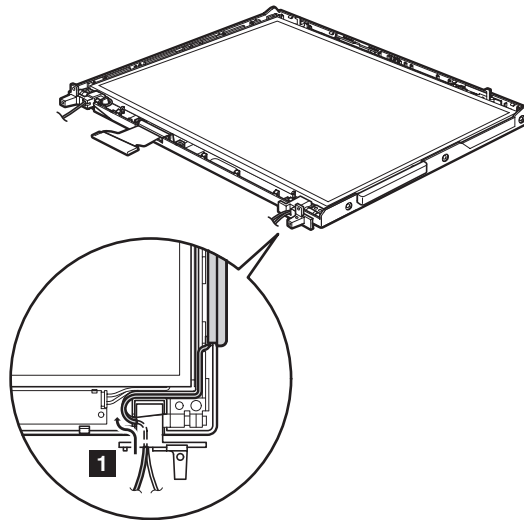
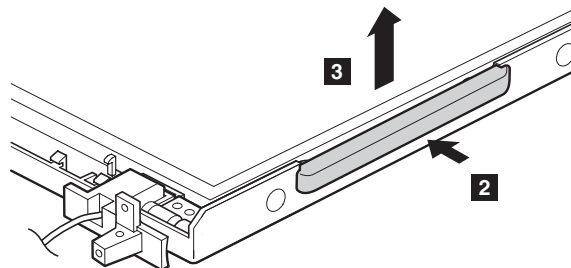
- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68
- "1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN" on page 74
- "1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN" on page 76
- "1110 PCI Express Mini Card for wireless WAN for R60 and R61i" on page 78
- "1130 Keyboard bezel and wireless WAN antenna cable (AUX)" on page 80
- "1170 LCD assembly" on page 88
- "2010 LCD front bezel" on page 106

Step	Screw (quantity)	Color	Torque
1	M2 × 3.5 mm, flat-head, nylon-coated (1)	Black	0.167 Nm (1.7 kgfcm)

When installing: Make sure that connector is attached firmly.

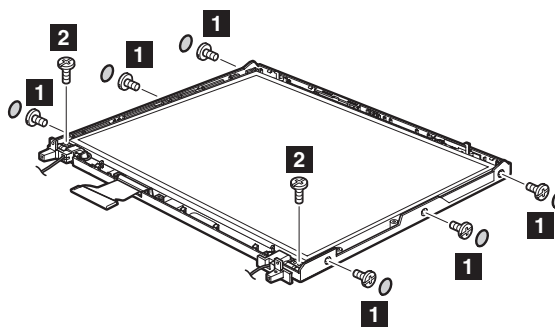
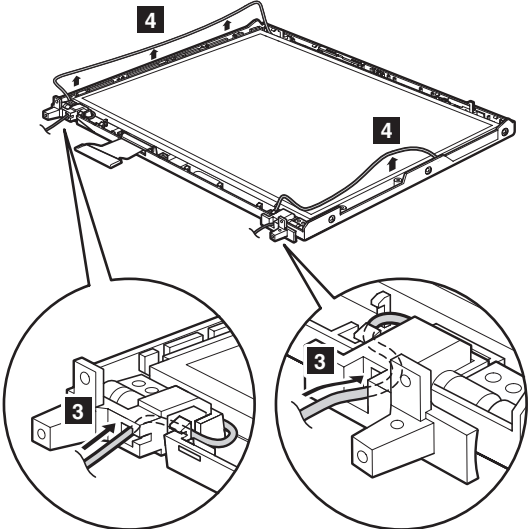
2040 Wireless WAN antenna cable (MAIN)

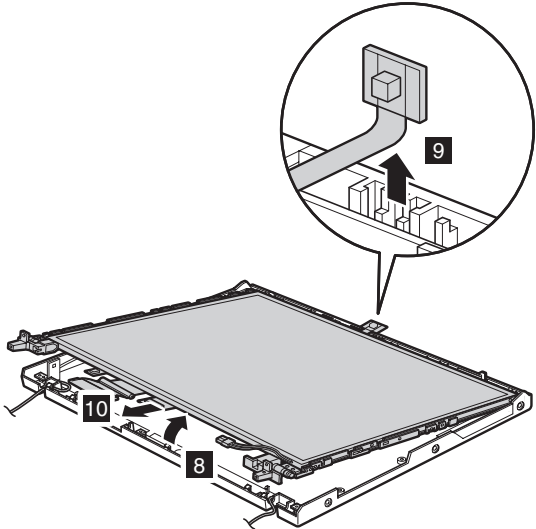
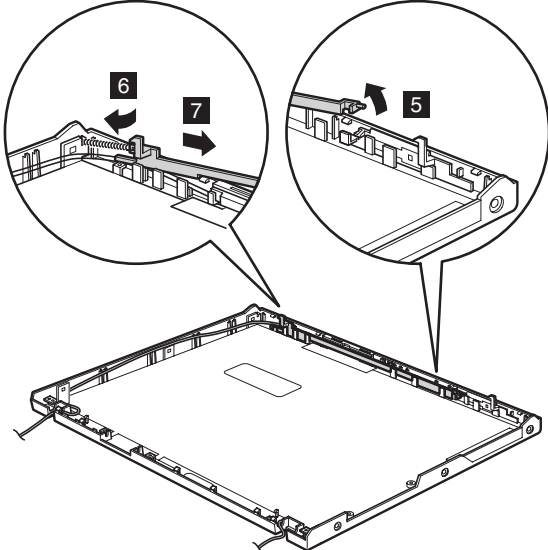
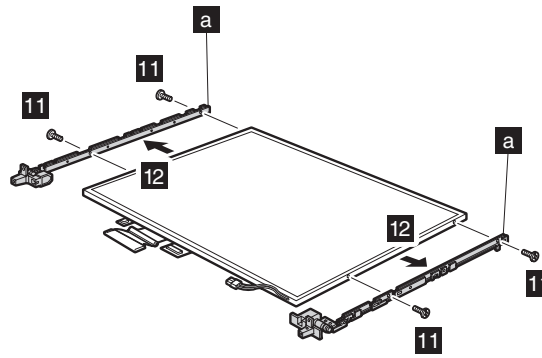
For access, remove these FRUs in order:

- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68
- "1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN" on page 74
- "1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN" on page 76
- "1110 PCI Express Mini Card for wireless WAN for R60 and R61i" on page 78
- "1130 Keyboard bezel and wireless WAN antenna cable (AUX)" on page 80
- "1170 LCD assembly" on page 88
- "2010 LCD front bezel" on page 106
- "2020 Inverter card" on page 107
- "2030 ***Bluetooth*** daughter card (BDC-2)" on page 108

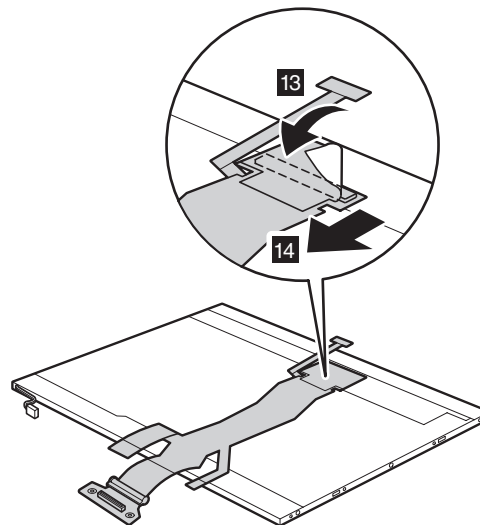
Note: Red cable is the wireless WAN antenna cable (MAIN).

When installing: When routing the antenna cable, do not tense the cable. To do so, the cable may get damaged by the hinge, and may cause a broken wire.

2050 LCD panel, LCD cable, and hinges

For access, remove these FRUs in order:

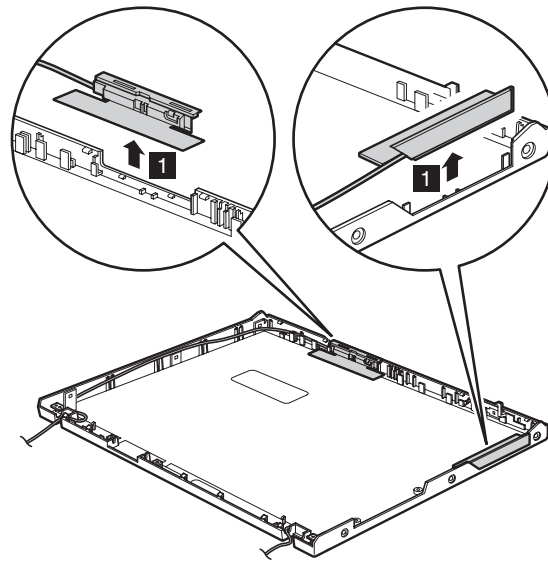
- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68
- "1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN" on page 74
- "1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN" on page 76
- "1110 PCI Express Mini Card for wireless WAN for R60 and R61i" on page 78
- "1130 Keyboard bezel and wireless WAN antenna cable (AUX)" on page 80
- "1170 LCD assembly" on page 88
- "2010 LCD front bezel" on page 106
- "2020 Inverter card" on page 107
- "2030 ***Bluetooth*** daughter card (BDC-2)" on page 108

Step	Screw cap	Screw (quantity)	Color	Torque
1	◯	M2 × 3.5 mm, small-head, nylon-coated (6)	Silver	0.167 Nm (1.7 kgfcm)
2	—	M2.5 × 6 mm, flat-head, nylon-coated (2)	Black	0.392 Nm (4 kgfcm)

(continued)

Remove the cables from the LCD panel.

(continued)

Remove the hinges (**a**) from the LCD panel.

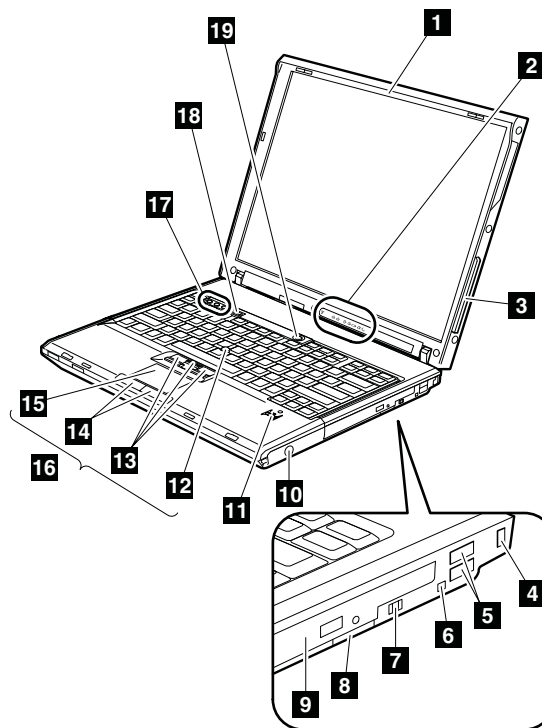
Step	Screw (quantity)	Color	Torque
11	M2 × 2.5 mm, flat-head, nylon-coated (4)	Black	0.167 Nm (1.7 kgfcm)

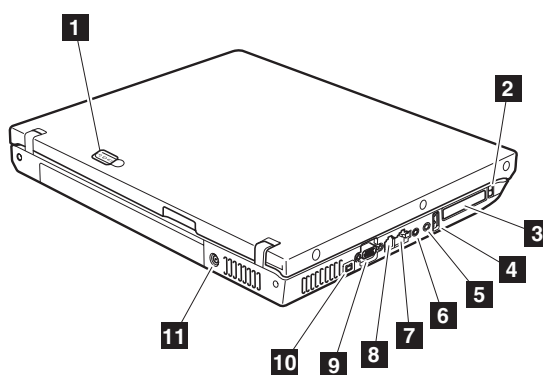
Remove the LCD cable assembly from the LCD panel.

2060 LCD rear cover and wireless LAN antenna cables

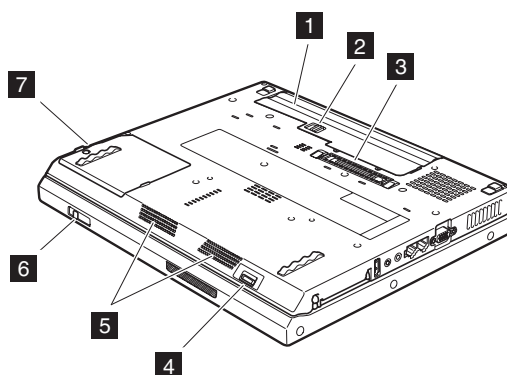
For access, remove these FRUs in order:

- "1010 Battery pack" on page 58
- "1040 Palm rest or palm rest with fingerprint reader" on page 64
- "1060 Keyboard" on page 68
- "1090 PCI Express Mini Card for 802.11 a/b/g wireless LAN" on page 74
- "1100 PCI Express Mini Card for 802.11 a/b/g/n wireless LAN" on page 76
- "1110 PCI Express Mini Card for wireless WAN for R60 and R61i" on page 78
- "1130 Keyboard bezel and wireless WAN antenna cable (AUX)" on page 80
- "1170 LCD assembly" on page 88
- "2010 LCD front bezel" on page 106
- "2020 Inverter card" on page 107
- "2030 ***Bluetooth*** daughter card (BDC-2)" on page 108
- "2040 Wireless WAN antenna cable (MAIN)" on page 109
- "2050 LCD panel, LCD cable, and hinges" on page 110

Locations

Front view

1 ThinkLight
2 Status indicators
Note: For the description of each indicator, see “Status indicators” on page 38.
3 Wireless WAN antenna
4 Security key hole
5 Universal serial bus (USB) connectors
6 Ultrabay Enhanced status indicator (for some models)
7 Ultrabay Enhanced latch (for some models)
8 Ultrabay Enhanced device eject lever (for some models)
9 Ultrabay Enhanced (for some models)
10 Video-out connector
11 Fingerprint reader (for some models)
12 TrackPoint pointing stick
13 TrackPoint buttons
14 Touch pad buttons (for some models)
15 Touch pad (for some models)
16 UltraNav
17 Volume control buttons
18 ThinkVantage button
19 Power switch

Rear view

1 Status indicators
Note: For the description of each indicator, see "Status indicators" on page 38.
2 PC Card/ExpressCard slots eject buttons
3 PC Card/ExpressCard slots or PC Card slot
4 USB connector
5 Stereo headphone jack
6 Microphone jack
7 RJ-45 (Ethernet) connector
8 RJ-11 (modem) connector
9 External monitor connector
10 IEEE 1394 (for some models)
11 AC power connector

Bottom view

1 Battery pack
2 Battery pack latch
3 Docking connector (for some models)
4 Wireless radio switch
5 Stereo speakers
6 LCD cover latch
7 Hard disk drive

Parts list

- Each FRU is available for all types or models, unless specific types or models are specified.
- FRU with specific models listed and described as xxU (where U is an example of a country designator) should be used for all models ending in U.
- FRU with specific models listed and described as 3Dx (where 3D is an example of a unique configuration) should be used for all of these models, unless specific country or region designator is specified.
- A CRU (customer replaceable unit) is identified by a single asterisk (*) or two asterisks (**) in the CRU ID column. An N in the CRU ID column means the part is not a CRU. A single asterisk (*) means the part is an External CRU; two asterisks (**) means the part is an Internal CRU.

  ThinkPad computers contain the following types of the external CRUs:

  External CRUs (pluggable)
  These CRUs unplug from the computer. Examples of these types of CRUs include an ac adapter, an external keyboard, a mouse, a power cord, a port replicator, a USB device, and an external bay device adapter.

  External CRUs with latches
  These CRUs have a latch to help you to remove and replace the part. Examples of these types of CRUs include a battery pack, an Ultrabay device such as an optical drive, a hard disk drive, and an extended battery.

  ThinkPad computers contain the following types of the internal CRUs:

  Internal CRUs (located behind an access panel)
  These CRUs are isolated parts within the computer that are concealed by an access panel that is typically secured by either one or two screws. Once the access panel is removed, only the specific CRU is visible. Examples of these types of CRUs include a memory card and a hard disk drive.

  Internal CRUs (located within the product itself)
  These CRUs are accessible only by opening the outer case of the computer. Examples of these CRUs include the integrated keyboard parts beneath the integrated keyboard and parts beneath the palm rest.
- A RoHS compliant FRU is identified by an R. An N in the RoHS ID column means the part is not a RoHS compliant FRU.
- FRUs marked with OP are available as options.

Overall

No.	FRU	FRU no.	RoHS ID	CRU ID
a - c	See “Miscellaneous parts” on page 255.			
1	LCD unit (see “LCD FRUs” on page 197.)			
2	Keyboard bezel assembly (14.1-in.) • 9455-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 7Tx, 7Ux, 7Xx, 7Yx, A2x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ABx, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, K2x, M9x, MAx, MBx, MCx, MDx, MEx • 9456-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, D4x, D5x, D6x, D9x, DFx, DGx, DHx, DJx, DKx, DLx, DMx, K9x, LAx,N2x, M4x, M5x, MNx, MPx, MQx • 9457-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Px, 7Vx, 7Wx, 92x, 93x, G2x, G3x, G8x, H2x, H3x, H4x, H6x, H7x, H8x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, HHx, HJx, HKx, HLx, HMx, HNx, HPx, HQx, HRx, HSx, KGx, KHx, KJx • 9458-CTO, 7Mx, L7x, LLx, LMx • 9459-CTO, 74x, 7Gx, 7Px, 7Sx, 7Rx, 92x, 93x, 99x, 9Ax, 9Bx, ASx, ATx, AUx, AVx, AWx, AXx, AZx, G2x, G3x, G9x • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Jx, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AYx, HDx, HFx, HSx • 9461-CTO, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Vx, 4Wx, 4Xx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CKx, HLx, HNx, M6x, M7x, M8x (continued)	39T7474	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
2	Keyboard bezel assembly (14.1-in.) • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Dx, 6Cx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 8Hx, 92x, 93x, 94x, E2x, E4x, E5x, E6x, G8x, G9x, E7x, E8x, E9x, EAx, EBx, ECx, EDx, EEx, EGx, EHx, EJx, EKx, ELx, H8x, H9x, HAx, KTx, KVx, HTx • 9463-CTO, 82x, HPx, LPx, LQx, LRx • 9464-CTO, 63x, 69x, 6Wx, 84x, 86x, 88x, 92x, 93x, 94x, CDx, CEx, CFx, CGx, CHx, CJx, G9x • 9446-CTO • 9447-CTO	39T7474	R	N
	Keyboard bezel assembly (15.0-in.) • 0656-all • 0657-all • 0658-all • 0659-all • 9455-CTO, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x,, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, ACx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BQx, BRx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, DPx, K3x, LCx, LDx, LEx, LFx, LUx, LVx, LWx, MFx, MGx, MHx, MJx, MKx, MLx, MMx • 9456-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, DQx, DRx, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, KAx, KLx, KMx, L2x, L3x, L4x, L5x, L6x, L9x, LBx, LGx, LHx, LJx, LKx, LXx, LYx, LZx, MRx, MSx, MTx, MUx, MVx (continued)	39T7475	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
2	Keyboard bezel assembly (15.0-in.) • 9457-CTO, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Wx, 94x, 95x, 96x, 97x, 98x, DSx, DTx, DUx, DVx, DWx, G4x, G5x, G6x, G7x, J3x, J6x, J7x, J9x, JAx, JBx, JDx, JFx, JGx, JHx, JJx, JKx, JLx, JMx, JNx, JPx, KDx, KEx, KFx, KNx, KPx, KQx, KRx, LSx • 9458-CTO, 8Qx, 8Rx, L8x, LNx • 9459-CTO, 8Jx, 8Kx, 8Vx, 8Wx, 94x, 95x, 96x, 97x, 98x, CUx, CVx, CWx, CXx, CYx, DNx, FXx, FYx, FZx, G4x, G5x, G6x, KKx, LTx • 9444-CTO • 9445-CTO • 9460-CTO, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 9Px, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HBx, HCx, HEx • 9461-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, D2x, D3x, D4x, D5x, D6x, D7x, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DUx, DXx, DYx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HMx, HRx, HWx, HXx, HYx • 9462-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 7Yx, 7Zx, 95x, 96x, 97x, 98x, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, F2x, GAx, F3x, F4x, F7x, F8x, FAx, FBx, FCx, FDx, FEx, FFx, FGx, H7x, KUx • 9463-CTO, 7Rx, HQx, HUx, HVx • 9464-CTO, 3Kx, 73x, 7Bx, 7Tx, 7Vx, 7Xx, 95x, 96x, 97x, BYx, BZx, DLx, DMx, DNx, DPx, DSx, DVx, DWx, GAx • 9446-CTO • 9447-CTO • 8942-all • 8943-all • 8944-all • 8945-all • 8947-all • 8948-all • 8949-all	39T7475	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
3	Palm rest assembly without fingerprint reader (14.1-in.) • 9455-CTO, 22x, 24x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Gx, 2Lx, 2Mx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Zx, 7Ux, 7 Xx, A2x, A4x, A5x, A7x, A8x, A9x, ADx, AFx, AHx, AJx, AKx, ALx, AMx, AQx, ARx, M9x, MBx, MCx • 9456-CTO, 52x, 53x, 54x, 55x, 56x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Kx, 5Lx, 5Nx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, D9x, LAx, M2x, M4x, M5x, MNx • 9457-CTO, 72x, 73x, 74x, 75x, 77x, 78x, 79x, 7Ax, 7Dx, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Px, 7Vx, 7Wx, 92x, G2x, H3x, H4x, H6x, H7x, HAx, HGx, HJx, HKx, HLx, HMx, HNx, HPx, HQx, HRx, KGx, KHx • 9458-CTO, 7Mx, L7x, LLx • 9459-CTO, 74x, 7Gx, 7Px, 7Rx, 7Sx, 92x, 99x, 9Ax, 9Bx, ATx, AVx, G2x, G9x • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 26x, 27x, 28x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Jx, 2Kx, 2Px, 2Sx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 89x, 8Ax, 8Cx, 8Dx, 8Ex, 8Gx, A3x, A4x, A6x, A7x, A9x, ACx, AFx, AGx, AJx, ALx, APx, AQx, ARx, ASx, AUx, AVx, AWx, HSx • 9461-CTO, 42x, 45x, 47x, 49x, 4Ax, 4Cx, 4Ex, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Sx, 4Tx, 4Ux, 4Vx, CKx, N6x, M7x, M8x • 9462-CTO, 62x, 64x, 65x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Jx, 6Mx, 6Qx, 6Rx, 6Ux, 6Vx, 6Xx, 6Yx, 6Zx, 92x, 94x, E2x, E4x, E6x, G8x, G9x, E7x, E9x, EAx, ECx, ELx, H8x, HAx, KTx, KVx, HTx • 9463-CTO, 82x, HPx, LQx, LRx • 9464-CTO, 69x, 84x, 86x, 88x, 92x, 94x, CDx, CEx, CFx, CGx, CJx, G9x • 9446-CTO • 9447-CTO	41W5157	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
3	Palm rest assembly with fingerprint reader (14.1-in.) • 9455-CTO, 23x, 25x, 2Ex, 2Fx, 2Hx, 2Jx, 2Kx, 2Nx, 2Yx, 7Tx, 7Yx, A6x, AAx, ABx, AEx, AGx, ANx, APx, K2x, MAx, MDx, MEx • 9456-CTO, 57x, 58x, 5Jx, 5Mx, 5Px, 5Qx, D4x, D5x, D6x, DFx, DGx, DHx, DJx, DKx, DLx, DMx, K9x, MPx, MQx • 9457-CTO, 76x, 7Bx, 7Cx, 7Ex, 7Lx, 93x, H2x, G3x, H8x, HBx, HCx, HDx, HEx, HFx, HHx, HSx, KJx • 9458-CTO, LMx • 9459-CTO, 93x, ASx, AUx, AWx, AXx, AZx, G3x • 9444-CTO • 9445-CTO • 9460-CTO, 23x, 24x, 25x, 29x, 2Fx, 2Gx, 2Hx, 2Lx, 2Mx, 2Nx, 2Qx, 2Rx, 2Tx, 8Bx, 8Fx, 8Jx, A5x, A8x, AAx, AEx, AHx, AKx, AMx, ANx, ATx, AYx, HDx, HFx • 9461-CTO, 43x, 44x, 46x, 48x, 4Bx, 4Dx, 4Fx, 4Rx, 4Wx, 4Xx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, HLx, HNx • 9462-CTO, 63x, 66x, 67x, 6Gx, 6Hx, 6Kx, 6Lx, 6Nx, 6Px, 6Sx, 6Tx, 6Wx, 8Hx, 93x, E5x, EBx, EDx, EEx, EHx, EJx, EKx, H9x • 9463-CTO, LPx • 9464-CTO, 63x, 6Wx, 93x, CHx • 9446-CTO • 9447-CTO	41W5158	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
3	Palm rest assembly without fingerprint reader with IBM Logo (15.0-in.) • 9455-CTO, 32x, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Lx, 4Nx, 4Qx, 4Rx, BLx, BVx, BXx, BZx, C2x, C4x, C5x, C9x, CAx, CEx, CRx, CSx, LEx, LFx, MFx, MHx • 9456-CTO, 62x, 63x, 64x, 66x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Hx, 6Jx, 6Nx, 6Px, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, DQx, DRx, FAx, KLx. KMx, L4x, L5x, L6x, L9x, LGx, LJx, LKx, MRx • 9457-CTO, 84x, 86x, 87x, 88x, 8Bx, 8Ex, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Nx, 8Px, 94x, 95x, 98x, DSx, DTx, DUx, DVx, DWx, G4x, J3x, J6x, J7x, J9x, JAx, JDx, JGx, JJx, JLx, JMx, JNx, KNx, KPx, KQx, KRx, LSx • 9458-CTO, 8Qx, 8Rx, L8x • 9459-CTO, 8Jx, 8Kx, 8Vx, 94x, 95x, 98x, G4x, CXx, FXx, LTx • 9444-CTO • 9445-CTO • 9460-CTO, 35x, 37x, 39x, 3Ax, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Lx, 3Mx, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, B5x, B6x, BAx, BCx, BDx, BFx, BGx, BKx, BMx, BQx, BSx, BUx, BVx, BWx • 9461-CTO, 53x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Hx • 9462-CTO, 74x, 78x, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Jx, 7Mx, 7Nx, 7Zx, 95x, 97x, 9Qx 9Tx, 9Vx, 9Wx, 9Yx, 9Zx, F3x, F4x, FCx, FDx • 9463-CTO, 7Rx, HUx, HVx • 9464-CTO, 3Kx, 7Bx, 7Tx, 7Vx, 95x, 97x, BYx, BZx, DLx, DNx, DSx, DVx • 9446-CTO • 9447-CTO • 8943-CTO, 4Jx, 4Lx, 4Nx, 4Qx, 52x 54x, 56x, 58x, 5Bx, 5Ex, 5Fx, 63x, 64x, AGx, ALx, AMx, ANx, APx, AQx, ARx, ASx, BKx, BWx • 8945-CTO, 7Ux, 7Wx, 7Yx, 82x, 84x, 86x, 88x, 8Ax, 8Dx, 8Gx, 8Hx, AKx, CRx, CUx	41W5159	R	**
	Palm rest assembly without fingerprint reader with IBM Logo (15.0-in.) • 8942-CTO, 22x, 3Gx, 3Kx, 3Lx, 46x, 47x, 48x, 49x, 9Qx, AAx, ABx, ACx, ADx, AEx, AFx • 8944-CTO, 73x, 76x, 77x, 7Ax, 7Bx, 7Cx, 7Gx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 9Wx, AJx, CPx • 8947-CTO, 9Gx, 9Kx, 9Lx, 9Px • 8948-CTO • 8949-CTO			
	xxB, xxC, xxH, xxV	41W5159	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
3	Palm rest assembly without fingerprint reader with ThinkPad Logo (15.0-in.) • 8942-CTO, 22x, 33x, 35x, 37x, 39x, 3Bx, 3Dx, A5x, ATx, AVx • 8944-CTO, 6Ax, 6Cx, 6Ex, 6Gx, 6Jx, 6Kx, 6Nx, 6Qx, 6Sx, 6Ux, 6Wx, 6Xx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 9Ux, CBx, CDx, CEx, CHx, CKx, CLx • 8947-CTO, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 99x, 9Ax, 9Bx, 9Cx, 9Dx, D6x, D7x, DGx, DHx • 8948-CTO • 8949-CTO			
	xxA, xxE, xxG, xxF, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT,, xxU, xxY	42W3150	R	**
	Palm rest assembly with fingerprint reader with IBM Logo (15.0-in.) • 9455-CTO, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Kx, 4Px, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BMx, BNx, BPx, BQx, BRx, BUx, C3x, C6x, C7x, CBx, CCx, CDx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, DPx, K3x, LCx, LDx, MJx, MKx, MLx, MMx • 9456-CTO, 65x, 67x, 6Dx, 6Ex, 6Fx, 6Gx, 6Kx, 6Lx, 6Mx, 6Qx, 6Zx, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, F3x, F4x, F5x, F6x, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, KAx, L2x, L3x, LBx, LHx, MSx, MTx, MUx, MVx • 9457-CTO, 82x, 83x, 85x, 89x, 8Ax, 8Cx, 8Mx, 8Wx, 96x, 97x, G5x, G6x, G7x, JBx, JFx, JHx, JKx, JPx, KDx, KEx, KFx • 9458-CTO, LNx • 9459-CTO, 8Wx, 96x, 97x, CUx, CVx, CYx, DNx, FYx, FZx, G5x, G6x, KKx • 9444-CTO • 9445-CTO (continued)	41W5160	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
3	Palm rest assembly with fingerprint reader with IBM Logo (15.0-in.) • 9460-CTO, 32x, 33x, 34x, 36x, 38x, 3Bx, 3Cx, 3Dx, 3Nx, 3Px, 3Xx, 9Px, B2x, B3x, B7x, B8x, B9x, BBx, BEx, BHx, BJx, BLx, BNx, BPx, BRx, H3x, HBx, HCx, HEx • 9461-CTO, 52x, 54x, 55x, 56x, 57x, 58x, 59x, 5Fx, 5Gx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, D2x, D3x, D4x, D5x, D6x, D7x, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DUx, DXx, DYx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HMx, HRx, HWx, HXx, HYx • 9462-CTO, 72x, 73x, 75x, 76x, 77x, 79x, 7Ax, 7Gx, 7Hx, 7Kx, 7Lx 7Px, 7Qx, 7Xx, 7Yx, 96x, 98x, 9Rx, 9Sx, 9Ux, 9Xx, F2x, F7x, F8x, FAx, FBx, FEx, FFx, FGx, GAx, H7x, KUx • 9463-CTO, HQx • 9464-CTO, 73x, 7Xx, 96x, DMx, DPx, DWx, GAx • 9446-CTO • 9447-CTO • 8943-CTO, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Kx, 4Mx, 4Px, 4Rx, 4Sx, 4Tx, 4Ux, 4Vx, 4Wx, 4Xx, 4Yx, 4Zx, 53x, 55x, 57x, 59x, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 65x, 9Rx, 9Sx, 9Tx, A6x, A7x, A8x, A9x, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx, BVx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx • 8945-CTO, 7Vx, 7Xx, 7Zx, 83x, 85x, 87x, 89x, 8Bx, 8Jx, CSx, CVx	41W5160	R	**
	Palm rest assembly with fingerprint reader with IBM Logo (15.0-in.) • 8942-CTO, 3Mx • 8944-CTO, 78x, 7Ex, 7Dx, 7Jx, 7Qx, 7Rx, 7Sx, 7Tx, CQx • 8947-CTO, 9Mx • 8948-CTO • 8949-CTO			
	xxB, xxC, xxH, xxV	41W5160	R	**
	Palm rest assembly with fingerprint reader with ThinkPad Logo (15.0-in.) • 8942-CTO, 32x, 34x, 36x, 38x, 3Ax, 3Cx, 3Ex, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, AUx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx • 8944-CTO, 66x, 67x, 68x, 69x, 6Bx, 6Dx, 6Fx, 6Hx, 6Lx, 6Mx, 6Px, 6Rx, 6Tx, 6Vx, 6Yx, 6Zx, 7Dx, 7Qx, 7Rx, 7Sx, 7Tx, 9Vx, AHx, CCx, CFx, CGx, CJx, CMx, CNx • 8947-CTO, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Rx, 8Sx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 9Ex, CWx, CXx, CYx, CZx, D2x, D3x, D4x, D5x, D8x, D9x, DAx, DBx, DCx, DDx, DEx, DFx • 8948-CTO • 8949-CTO			
	xxA, xxE, xxG, xxF, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT,, xxU, xxY	42W3151	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
3	Palm rest assembly TrackPoint only with IBM Logo (15.0-in.) • 0656-all • 0657-all • 0658-all • 0659-all • 9455-CTO, 4Mx, ACx, BWx, BYx, C8x, LUx, LVx, LWx, MGx • 9456-CTO, LXx, LYx, LZx • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO • 8943-CTO • 8945-CTO	41W5190	R	**
	Palm rest assembly TrackPoint only with IBM Logo (15.0-in.) • 8942-CTO • 8944-CTO • 8947-CTO • 8948-CTO • 8949-CTO			
	xxB, xxC, xxH, xxV	41W5190	R	**
	Palm rest assembly TrackPoint only with ThinkPad Logo (15.0-in.) • 8942-CTO • 8944-CTO • 8947-CTO • 8948-CTO • 8949-CTO			
	xxA, xxE, xxG, xxF, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT,, xxU, xxY	42W3152	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
4	Modem daughter card (MDC-1.5)	39T0495	R	**
5	ThinkPad 11a/b/g Wireless LAN Mini PCI Express Adapter • 0656-CTO, 29x, A4x • 0657-CTO, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Px, 44x, 4Dx, 4Ex, 4Fx, 4Hx, 4Jx, 4Kx, 4Lx, 4Rx, 4Sx, 4Ux, 9Ex, 9Fx, 9Gx, 9Hx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, CBx, CCx, CEx, HSx, HTx, J4x, JWx, KCx, KDx, KMx, KNx, KRx, KSx, LDx, LGx, LKx, LLx, LMx, LNx, LPx • 0658-CTO, 52x, 5Qx, 5Rx, 5Sx, 5Tx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x, 64x, 65x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 7Lx, 7Mx, 7Nx, 8Ax, 8Bx, 8Cx, 8Kx, 8Lx, 8Mx, 9Jx, 9Kx, 9Lx, 9Mx, 9Nx, CNx, CPx, CQx, CRx, CSx, CTx, CUx, CVx, CWx, CXx, CYx, CZx, D2x, D3x, D4x, D5x, D6x, D9x, DAx, DBx, DCx, DDx, DEx, DFx, DQx, DRx, DSx, E4x, E7x, EGx, EVx, EWx, EXx, EYx, EZx, F2x, F3x, F4x, FEx, FFx, FHx, FNx, FQx, FTx, FUx, FVx, FWx, FXx, HLx, HMx, JGx, KQx, L2x, L4x, L5x, L6x • 0659-CTO, H5x, H6x, JPx • 9455-CTO, 25x, 26x, 2Gx, 2Kx, 3Nx, 3Px, 4Lx, 4Mx, 7Xx, 7Yx, A4x, A5x, A6x, ADx, AEx, AQx, BVx, BWx, BYx, C3x, C8x, CJx, CKx, K2x, K3x, LUx, LVx, LWx, M9x, MAx, MCx, MFx, MGx • 9456-CTO, 54x, 59x, 5Ax, 5Bx, 5Dx, 5Ex, 5Gx, 5Hx, 5Jx, 5Kx, 5Mx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 63x, 66x, 68x, 6Ax, 6Jx, 6Kx, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, FRx, FSx, L9x, LAx, M4x, M5x, LXx, LYx, LZx • 9457-CTO, KGx, LSx • 9458-CTO • 9459-CTO, CUx, LTx • 9444-CTO • 9445-CTO • 9460-CTO, HSx • 9461-CTO, 4Hx, M6x, M7x, M8x • 9462-CTO, 6Sx, EHx, HTx • 9463-CTO, HPx, HUx, HVx • 9464-CTO • 9446-CTO • 9447-CTO • 8942-CTO, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx • 8943-CTO • 8944-CTO, 6Jx, 6Kx, 6Lx, 6Mx, 7Bx, 7Dx, AJx, CDx, CEx, CFx, CGx, CPx, CQx • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO			
	xxA, xxB, xxC, xxF, xxG, xxH, xxL, xxM, xxP, xxQ, xxS, xxU, xxY	39T5578	R	**
	xxE, xxJ	39T5579	R	**
	xxV	39T5580	R	**
	xxT	39T5581	R	**
	xxK	39T5582	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
5	Intel PRO Wireless 3945ABG Mini-PCI Express Adapter • 0656-CTO • 0657-CTO, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 42x, 43x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Mx, 4Nx, 4Px, 4Qx, 4Tx, A8x, A9x, ACx, ADx, AEx, ATx, AUx, AXx, AYx, AZx, HKx, HQx, HUx, HVx, J5x, J6x, JMx, JNx, JSx, JTx, JUx, JVx, JXx, JYx, JZx, K2x, K5x, KEx, KFx, KGx, KJx, KKx, KLx, KTx, KXx, KYx, KUx, LEx • 0658-CTO, 5Vx, 66x, 67x, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Wx, 6Xx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Px, 7Qx, 7Tx, 7Ux, 7Yx, 7Zx, 82x, 84x, 85x, 86x, 87x, 88x, 89x, 9Nx, CKx, CLx, CMx, DTx, DUx, DVx, DWx, DXx, DYx, DZx, E2x, E3x, E5x, E6x, ECx, EDx, EEx, EFx, EHx, ELx, EMx, ENx, EQx, ERx, FRx, FSx, G4x, H2x, H3x, H4x, J7x, J8x, JEx, JFx, JHx, JJx, JKx, K8x, K9x, KAx, KBx, L9x, LAx • 0659-CTO, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, H7x, H8x, H9x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, JQx, JRx • 9455-CTO, 22x, 23x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Jx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 32x, 33x, 34x, 35x, 36x, 38x, 39x, 3Ax, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Vx, 3Wx, 3Xx, 3Yx, 43x, 44x, 45x, 46x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Nx, 4Px,4Qx, 4Rx, 7Tx, 7Ux, AAx, ABx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ARx, A2x, A7x, A9x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BRx, BUx, BZx, C4x, C5x, C6x, C7x, C9x, CAx, CBx, CCx, CDx, CEx, CQx, CRx, CSx, DPx, LCx, LDx, LEx, LFx • 9456-CTO, 6Dx, 6Ex, 6Fx, 6Gx, 6Nx, 6Px, 6Qx, 6Zx, DJx, DKx, DQx, DRx, E5x, E6x, E7x, ECx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EZx, F3x, F4x, F5x, F6x, FBx, FCx, FKx, FNx, HTx, K8x, K9x, KAx, KLx, KMx, L2x, L3x, L4x, L5x, L6x, LBx, LGx, LHx, LJx, LKx, M2x • 9457-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Px, 7Vx, 7Wx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Wx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, DSx, DTx, DUx, DVx, DWx, G2x, G3x, G4x, G5x, G6x, G7x, G8x, H2x, H3x, H4x, H6x, H7x, H8x, HAx, HBx, HCx, HDx, HEx, HGx, HHx, HJx, HKx, HMx, HNx, HPx, HQx, HRx, HSx, J3x, J6x, J7x, J9x, JAx, JBx, JDx, JFx, JGx, JHx, JJx, JKx, JLx, JMx, JNx, JPx, KDx, KEx, KFx, KHx, KJx, KNx, KPx, KQx, KRx • 9458-CTO, 7Mx, 8Qx, 8Rx, L7x, L8x, LLx, LMx, LNx • 9459-CTO, 74x, 7Gx, 7Px, 7Rx, 7Sx, 8Jx, 8Kx, 8Vx, 8Wx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, ASx, ATx,AVx, AWx, AXx, AZx, CVx, CXx, CYx, DNx, FXx, FYx, FZx, G2x, G3x, G4x, G5x, G9x, KKx • 9444-CTO • 9445-CTO (continued)			
	xxA, xxB, xxF, xxH, xxL, xxM, xxP, xxQ, xxS, xxU, xxV, xxY	42T0853	R	**
	xxG	42T0855	R	**
	xxC, xxK	42T0857	R	**
	xxE, xxJ	42T0859	R	**
	xxT	42T0861	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
5	Intel PRO Wireless 3945ABG Mini-PCI Express Adapter • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Jx, 9Px, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AYx, B2x, B3x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HBx, HCx, HDx, HEx, HFx • 9461-CTO, 42x, 47x, 4Ax, 4Bx, 4Jx, 4Lx, 4Mx, 4Nx, 4Sx, 4Tx, 4Ux, 4Xx, 52x, 54x, 56x, 57x, 58x, 59x, 5Bx, 5Cx, 5Ex, 5Fx, 5Gx, 5Kx, 5Lx, 5Mx, 5Nx, C8x, C9x, CAx, CKx, D5x, DDx, DEx, DFx, DHx, DJx, DXx, DYx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HLx, HMx, HNx, HRx, HWx, HXx, HYx • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 7Yx, 7Zx, 8Hx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, E2x, E4x, E5x, E6x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EJx, EKx, ELx, F3x, F4x, F7x, F8x, FAx, FBx, FCx, FDx, FEx, FFx, FGx, G8x, G9x, GAx, H8x, H9x, HAx, KTx, KUx, KVx • 9463-CTO,7Rx, 82x, HQx, LPx, LQx, LRx • 9464-CTO, 3Kx, 63x, 69x, 6Wx, 73x, 7Bx, 7Tx, 7Vx, 7Xx, 84x, 86x, 88x, 92x, 93x, 94x, 95x, 96x, 97x, BYx, BZx, CDx, CEx, CFx, CGx, CHx, CJx, DLx, DMx, DNx, DPx, DSx, DVx, DWx, G9x, GAx • 9446-CTO • 9447-CTO • 8942-CTO, 22x, 33x, 34x, 35x, 36x, 37x, 38x, 3Bx, 3Cx, 3Dx, 3Ex, 3Gx, 3Kx, 3Lx, 3Mx, 46x, 47x, 48x, A5x, ACx, ADx, AEx, AFx, ATx, AUx, AVx, AWx • 8943-CTO, 54x, 55x, 56x, 57x, 58x, 59x, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Zx, 63x, A6x, A7x, A8x, A9x, AGx, BNx, BPx, BQx, BRx, BSx, BTx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx • 8944-CTO, 66x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 73x, 76x, 77x, 78x, 7Ax, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 9Ux, 9Vx, CBx, CCx, CHx, CJx • 8945-CTO, 7Ux, 7Vx, 7Yx, 7Zx, 86x, 87x, 88x, 89x, 8Ax, 8Bx, AKx, CRx, CSx, CUx, CVx • 8947-CTO, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Rx, 8Sx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 9Bx, 9Cx, 9Dx, 9Ex, 9Gx, 9Kx, 9Lx, 9Mx, 9Px, CWx, CXx, CYx, CZx, D2x, D3x, D4x, D5x, D6x, D7x, D8x, D9x, DAx, DBx, DCx, DDx, DEx, DFx, DGx, DHx • 8948-CTO, 22x • 8949-CTO, 22x			
	xxA, xxB, xxF, xxH, xxL, xxM, xxP, xxQ, xxS, xxU, xxV, xxY	42T0853	R	**
	xxG	42T0855	R	**
	xxC, xxK	42T0857	R	**
	xxE, xxJ	42T0859	R	**
	xxT	42T0861	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
5	ThinkPad 11a/b/g/n Wireless LAN Mini-PCI Express Adapter • 0656-CTO • 0657-CTO, AFx, AGx, ARx, ASx, AVx, AWx, HRx • 0658-CTO, ESx • 0659-CTO • 9455-CTO, B2x, BLx • 9456-CTO, EYx, FJx, FLx • 9457-CTO, HFx • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, B5x • 9461-CTO, D6x, D7x, DGx, DKx, DUx • 9462-CTO, F2x, • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO			
	xxA, xxB, xxC, xxF, xxG, xxH, xxL, xxM, xxP, xxQ, xxS, xxU, xxY	42T0825	R	**
	xxE, xxJ	42T0827	R	**
	xxV	42T0829	R	**
	xxK	42T0831	R	**
	xxT	42T0833	R	**
	Intel Wireless WiFi Link 4965AGN • 8942-CTO, 49x • 8943-CTO, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 5Bx, 5Ex, 5Fx, 5Gx, 62x, 64x, 65x, 9Rx, 9Sx, 9Tx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BMx • 8944-CTO, 67x, 68x, 69x, AHx • 8945-CTO, 8Dx, 8Gx, 8Hx, 8Jx • 8947-CTO • 8948-CTO • 8949-CTO			
	xxB, xxF, xxH, xxL, xxM, xxP, xxS, xxU, xxV, xxY	42T0865	R	**
	xxG	42T0867	R	**
	xxC	42T0869	R	**
	xxE, xxJ	42T0871	R	**
	xxK	42T0905	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
5	Intel Wireless WiFi Link 4965AGN (11n disabled) • 8942-CTO • 8943-CTO, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx • 8944-CTO • 8945-CTO, 7Wx, 7Xx, 82x, 83x • 8947-CTO • 8948-CTO • 8949-CTO			
	xxA, xxB, xxF, xxH, xxL, xxM, xxP, xxQ, xxS, xxU, xxV, xxY	42T0873	R	**
	xxG	42T0875	R	**
	xxC, xxK	42T0877	R	**
	xxE, xxJ	42T0879	R	**
	ThinkPad 11b/g Wireless LAN Mini-PCI Express Adapter II • 8942-CTO, 32x, 9Qx, AAx, ABx • 8943-CTO, ALx, AMx, ANx, APx, AQx, ARx, ASx • 8944-CTO, 6Wx, 6Xx, 6Yx, 6Zx, 7Cx, 7Ex, 7Gx, 7Jx, 9Wx, CKx, CLx, CMx, CNx • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	42T0917	R	**
6	Backup battery	02K7078	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
7	Structure frame (14.1-in.) • 9455-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 7Tx, 7Ux, 7Xx, 7Yx, A2x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ABx, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, K2x, M9x, MAx, MBx, MCx, MDx, MEx • 9456-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, D4x, D5x, D6x, D9x, DFx, DGx, DHx, DJx, DKx, DLx, DMx, K9x, LAx, N2x, M4x, M5x, MNx, MPx, MQx • 9457-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Px, 7Vx, 7Wx, 92x, 93x, G2x, H2x, H3x, H4x, G3x, G8x, H6x, H7x, H8x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, HHx, HJx, HKx, HLx, HMx, HNx, HPx, HQx, HRx, HSx, KGx, KHx, KJx • 9458-CTO, 7Mx, L7x, LLx, LMx • 9459-CTO, 74x, 7Gx, 7Px, 7Sx, 7Rx, 92x, 93x, 99x, 9Ax, 9Bx, ASx, ATx, AUx, AVx, AWx, AXx, AZx, G2x, G3x, G9x • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, HDx, HFx, HSx • 9461-CTO, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Vx, 4Wx, 4Xx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, HLx, HNx, M6x, M7x, M8x • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Dx, 6Cx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 8Hx, 92x, 93x, 94x, E2x, E4x, E5x, E6x, G8x, G9x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EGx, H8x, H9x, HAx, KTx, KVx, HTx • 9463-CTO, 82x, HPx, LPx, LQx, LRx • 9464-CTO, 63x, 69x, 6Wx, 84x, 86x, 88x, 92x, 93x, 94x, CDx, CEx, CFx, CGx, CHx, CJx, G9x • 9446-CTO • 9447-CTO	41W5161	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
7	Structure frame (14.1-in) for WWAN • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 8Jx, AYx • 9461-CTO, CKx • 9462-CTO, EHx, EJx, EKx, ELx • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42R9852	R	N
	Structure frame (15.0-in.) • 9455-CTO, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x,, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, ACx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BQx, BRx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, DPx, K3x, LCx, LDx, LEx, LFx, LUx, LVx, LWx, MFx, MGx, MHx, MJx, MKx, MLx, MMx • 9456-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, DRx, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, KAx, KLx, L2x, L3x, L4x, L5x, L6x, L9x, LBx, LGx, LHx, LJx, LKx, LXx, LYx, LZx, MRx, MSx, MTx, MUx, MVx • 9457-CTO, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Wx, 94x, 95x, 96x, 97x, 98x, DSx, DTx, DUx, DWx, G4x, G5x, G6x, G7x, J3x, J6x, J7x, J9x, JAx, JBx, JDx, JFx, JGx, JHx, JJx, JKx, JLx, JMx, JNx, JPx, KDx, KEx, KFx, KNx, KPx, KQx, KRx, LSx • 9458-CTO, 8Qx, 8Rx, L8x, LNx • 9459-CTO, 8Jx, 8Kx, 8Vx, 8Wx, 94x, 95x, 96x, 97x, 98x, CUx, CVx, CWx, CXx, CYx, DNx, FXx, FYx, FZx, G4x, G5x, G6x, KKx, LTx • 9444-CTO • 9445-CTO (continued)	41W5162	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
7	Structure frame (15.0-in.) • 9460-CTO, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 9Px, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HBx, HCx, HEx • 9461-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, D2x, D3x, D4x, D5x, D6x, D7x, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DUx, DXx, DYx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HMx, HRx, HWx, HXx, HYx • 9462-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx,7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 7Yx, 7Zx, 95x, 96x, 97x, 98x, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, F2x, GAx, F3x, F4x, F7x, F8x, FAx, FBx, FCx, FDx, FEx, FFx, FGx, H6x, H7x, KUx • 9463-CTO, 7Rx, HQx, HUx, HVx • 9464-CTO, 3Kx, 73x, 7Bx, 7Tx, 7Vx, 7Xx, 95x, 96x, 97x, BYx, BZx, DLx, DMx, DNx, DPx, DSx, DVx, DWx, GAx • 9446-CTO • 9447-CTO	41W5162	R	N
	Structure frame (15.0-in) for WWAN • 9455-CTO, 4Px, 4Qx, 4Rx, BUx • 9456-CTO, EYx, EZx, DQx, KMx • 9457-CTO, DVx • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42R9853	R	N
	Structure frame for R60e and R61i • 0656-all • 0657-all • 0658-all • 0659-all	41W6346	R	N
	Structure frame for R61 and R61i • 8942-all • 8943-all • 8944-all • 8945-all • 8947-all • 8948-all • 8949-all	42X4912	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
8	S-Video Card (for 15.0-in. models) • 9455-CTO, ACx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BQx, BRx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, DPx, K3x, LCx, LDx, LEx, LFx, LUx, LVx, LWx, MFx, MGx, MHx, MJx, MKx, MLx, MMx • 9456-CTO, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, DQx, DRx, K8x, KAx, KLx, KMx, L2x, L3x, L4x, L5x, L6x, L9x, LBx, LGx, LHx, LJx, LKx, LXx, LYx, LZx, MRx, MSx, MTx, MUx, MVx • 9457-CTO, G4x, J3x, J6x, J7x, J9x, JAx, JBx, JPx, JDx, G5x, JFx, JGx, G6x, JHx, JJx, JKx, JLx, JMx, JNx, G7x, DSx, DTx, DUx, DVx, DWx, KDx, KEx, KFx, KNx, KPx, KRx, LSx • 9458-CTO, L8x, LNx • 9459-CTO, CUx, CVx, G4x, CXx, CYx, DNx, FXx, FYx, FZx, G5x, KKx, G6x, LTx • 9444-CTO • 9445-CTO • 9460-CTO, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HBx, HCx, HEx • 9461-CTO, D2x, D3x, D4x, D5x, D6x, D7x, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DUx, DXx, DYx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HMx, HRx, HWx, HXx, HYx • 9462-CTO, F2x, GAx, F3x, F4x, F7x, F8x, FAx, FBx, FCx, FDx, FEx, FFx, FGx, H7x, KUx • 9463-CTO, HQx, HUx, HVx • 9464-CTO, BYx, GAx, BZx, DLx, DMx, DNx, DPx, DVx, DWx, DSx • 9446-CTO • 9447-CTO • 8942-all • 8943-all • 8944-all • 8945-all • 8947-all • 8948-all • 8949-all	41W1313	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
8	FFC Cable for S-Video Card (for 15.0-in. models) • 9455-CTO, ACx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BQx, BRx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, DPx, K3x, LCx, LDx, LEx, LFx, LUx, LVx, LWx, MFx, MGx, MHx, MJx, MKx, MLx, MMx • 9456-CTO, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, DQx, DRx, K8x, KAx, KLx, KMx, L2x, L3x, L4x, L5x, L6x, L9x, LBx, LGx, LHx, LJx, LKx, LXx, LYx, LZx,MRx, MSx, MTx, MUx, MVx • 9457-CTO, G4x, J3x, J6x, J7x, J9x, JAx, JBx, JPx, JDx, G5x, JFx, JGx, G6x, JHx, JJx, JKx, JLx, JMx, JNx, G7x, DSx, DTx, DUx, DVx, DWx, KDx, KEx, KFx, KNx, KPx, KRx, LSx • 9458-CTO, L8x, LNx • 9459-CTO, CUx, CVx, G4x, CXx, CYx, DNx, FXx, FYx, FZx, G5x, KKx, G6x, LTx • 9444-CTO • 9445-CTO • 9460-CTO, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HBx, HCx, HEx • 9461-CTO, D2x, D3x, D4x, D5x, D6x, D7x, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DUx, DXx, DYx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HMx, HRx, HWx, HXx, HYx • 9462-CTO, F2x, GAx, F3x, F4x, F7x, F8x, FAx, FBx, FCx, FDx, FEx, FFx, FGx, H7x, KUx • 9463-CTO, HQx, HUx, HVx • 9464-CTO, BYx, GAx, BZx, DLx, DMx, DNx, DPx, DVx, DWx, DSx • 9446-CTO • 9447-CTO • 8942-all • 8943-all • 8944-all • 8945-all • 8947-all • 8948-all • 8949-all	91P7019	R	N
9	Hard disk drive rubber rails	42X3998	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
10	SATA hard disk drive, 40 GB, 9.5 mm, 5,400 rpm • 0656-CTO, 23x, 24x, 25x, 26x, 2Cx, 2Dx, F5x, F6x • 0657-CTO, 8Rx, 8Sx, 8Tx, 8Ux, 9Gx, 9Hx, BKx, BLx, BMx, BNx, BPx, BQx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, CEx • 0658-CTO, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 65x, 7Kx, 7Mx, 7Nx, 8Dx, 8Ex, 8Fx, 8Gx, 9Lx, 9Mx, G3x, D8x, D9x, DAx, DBx, DCx, DDx, DJx, DKx, DLx, DMx, DNx, DPx, EUx, F7x, F8x, F9x, FAx, FBx, FHx, HNx, HPx • 0659-CTO • 9455-CTO, 24x, 2Ex, 2Fx, 3Bx, 3Lx, 3Mx, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 4Mx, A8x, ACx, ANx, APx, BAx, BBx, BGx, BHx, C2x, CGx, CHx • 9456-CTO, D9x, DLx, DMx, EMx, ENx, ETx, EUx, FAx, FPx, FQx • 9457-CTO, 7Px, 94x • 9458-CTO • 9459-CTO, 7Px, 94x • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO			
	HGST	42T1487	R	**
	Fujitsu	39T2881	R	**
	Toshiba	39T2709	R	**
	SATA hard disk drive, 60 GB, 9.5 mm, 5,400 rpm • 0656-CTO, 22x, 29x, A3x, A4x • 0657-CTO, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Tx, 3Ux, 45x, 46x, 47x, 48x, 49x, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Rx, 4Sx, 4Tx, 4Ux, A8x, A9x, ARx, ASx, AXx, B8x, B9x, BFx, BGx, BHx, BJx, BTx, BUx, C9x, CAx, HSx, HTx, JSx, JTx, JWx, KCx, KGx, KSx, LFx, AAx • 0658-CTO, 53x, 54x, 5Ax, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x, 64x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Kx, 6Gx, 6Hx, 6Jx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 76x, 77x, 78x, 7Gx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Wx, 7Xx, 7Yx, 7Zx, 82x, 83x, 84x, 85x, 86x, 87x, 8Hx, 8Jx, 8Qx, 9Nx, CKx, CUx, CVx, D4x, D5x, D6x, D7x, DGx, DHx, DQx, DRx, DSx, DTx, DUx, E4x, E5x, E8x, E9x, EJx, EKx, ELx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, F2x, F3x, F4x, FCx, FDx, FXx, FYx, FZx, G3x, G4x, HLx, HMx, J7x, JGx, KPx, KZx, L5x, L6x, L7x, L8x 8Kx, 8Lx, 8Mx, 8Nx, 8Px • 0659-CTO, 92x, 9Cx, 9Dx, H8x, JPx, H5x (continued)			
	HGST OP	42T1489	R	**
	Fujitsu	39T2883	R	**
	Toshiba	39T2711	R	**
	WD	42T1429	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
10	SATA hard disk drive, 60 GB, 9.5 mm, 5,400 rpm • 9455-CTO, 22x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Cx, 2Dx, 2Gx, 2Jx, 2Kx, 2Px, 2Tx, 2Qx, 2Sx, 2Ux, 2Vx, 33x, 34x, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Kx, 43x, 45x, 46x, 48x, 49x, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Lx, 4Mx, 4Nx, 4Rx, A4x, A5x, A6x, A7x, A8x, ACx, ADx, AEx, AJx, ANx, APx, AQx, ARx, B8x, B9x, BEx, BFx, BVx, BWx, BXx, BYx, BZx, C2x, C8x, C9x, CAx, CBx, CEx, CGx, CHx CSx, LDx, LUx, 7Xx, 7Yx, M9x, MAx, MBx, MCx, MDx, MEx, MFx, MGx, MHx, MJx, MKx • 9456-CTO, 54x, 59x, 5Ax, 5Bx, 5Dx, 5Ex, 5Gx, 5Hx, 5Jx, 5Kx, 5Mx, 5Rx, 5Sx, 5Ux, 68x, 6Ax, 6Dx, 6Ex, 6Jx, 6Kx, 6Nx ,6Rx, 6Sx, 6Xx, 6Zx, D9x, DJx, DLx, DMx, EKx, ELx, ERx, ESx, FKx, FAx, FPx, FQx, K9x, KAx, L3x, L9x, LGx, LXx, MNx, MPx, MQx, MRx, MSx, MTx • 9457-CTO, 72x, 73x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Fx, 7Gx, 7Hx, 7Jx, 7Px, 82x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Ex, 8Gx, 8Hx, 8Jx, 8Nx, 8Px, 8Wx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, DTx, G3x, G6x, H4x, H6x, HAx, HSx, J3x, J9x, JAx, JBx, JDx, JFx, JGx, JJx, JKx, JLx, JPx, KGx, KPx • 9458-CTO, 7Mx, 8Qx, 8Rx • 9459-CTO, 7Gx, 7Px, 7Rx, 7Sx, 8Jx, 8Vx, 8Wx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, ATx, AUx, AVx, AZx, CXx, CYx, DNx, FXx, G3x, G6x • 9444-CTO • 9445-CTO • 9460-CTO, 26x, 27x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Kx, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 35x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Fx, 3Hx, 3Jx, 3Tx, 8Cx, ANx, APx, AQx, AVx, AWx, BDx, BPx, BQx, BRx, BSx, BUx, BWx, H3x, HSx • 9461-CTO, 42x, 47x, 4Hx, 4Jx, 4Lx, 4Mx, 4Sx, 4Vx, 5Bx, 5Cx, 5Ex, 5Fx, 5Kx, CKx • 9462-CTO, 64x, 68x, 69x, 6Ax, 6Cx, 6Dx, 7Dx, 6Gx, 6Hx, 6Jx, 6Kx, 6Qx, 6Vx, 6Wx, 74x, 78x, 7Ax, 7Bx, 7Cx, 7Ex, 7Gx, 7Hx, 7Jx, 7Kx, 92x, 93x, 94x, 95x, 96x, 97x, 9Yx, E4x, EAx, EBx, ECx, F4x, FCx, H8x, H9x • 9463-CTO, 7Rx, 82x • 9464-CTO, 69x, 6Wx, 7Bx, 7Vx, 86x, 88x, 92x, 93x, 94x, 95x, 96x, 97x, CGx, CHx, CJx, DLx, DNx, DPx, DSx, DVx, DWx • 9446-CTO • 9447-CTO			
	HGST OP	42T1489	R	**
	Fujitsu	39T2883	R	**
	Toshiba	39T2711	R	**
	WD	42T1429	R	**
	SATA hard disk drive, 60 GB, 9.5 mm, 5,400 rpm • 8942-CTO, 32x, 3Nx, 3Px, 3Rx, 3Sx, 3Ux, 3Vx, 3Xx, 3Yx, 9Zx, A3x, AXx, AYx, B2x, B3x, B5x, B6x, B8x, B9x • 8943-CTO, 4Dx, 4Hx, 4Vx, 4Zx, 5Hx, 5Jx, 5Lx, 5Mx, 5Px, 5Qx, 5Sx, 5Tx, A8x, BEx, BJx, BRx, BVx, BYx, BZx, C2x, C3x, C5x, C6x, C8x, C9x • 8944-CTO, 7Kx • 8945-CTO • 8947-CTO, 8Lx, 8Nx, 8Qx, 8Sx, 92x, 94x, 96x, 98x, CXx, CZx, D3x, D5x, D9x, DBx, DDx, DFx • 8948-CTO • 8949-CTO			
	HGST OP	42T1489	R	**
	Fujitsu	39T2883	R	**
	Seagate	42T1303	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
10	SATA hard disk drive, 80 GB, 9.5 mm, 5,400 rpm • 0656-CTO • 0657-CTO, 3Mx, 3Nx, 3Vx, 3Wx, 3Xx, 4Ax, 4Qx, 9Ex, 9Fx, ACx, ADx, ATx, AUx, AVx, AWx, AYx, B2x, B3x, B4x, B5x, B6x, B7x, BAx, BBx, BCx, BDx, BEx, BRx, BSx, CBx, CCx, HKx, HQx, HUx, HVx, J4x, J5x, J6x, JMx, JNx, JVx, JZx, K2x, K3x, K4x, K5x, KDx, KEx, KFx, KKx, KLx, KMx, KRx, KVx, KWx, KXx, KYx, LDx, LEx, LGx, LHx, LKx, LNx, LPx • 0658-CTO, 52x, 5Qx, 5Rx, 5Sx, 5Tx, 6Ex, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 79x, 7Ax, 7Hx, 7Jx, 7Lx, 88x, 89x, 8A, 8Bx, 8Cx, 9Jx, 9Kx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, CTx, CWx, CXx, CYx, CZx, D2x, D3x, DEx, DFx, DVx, DWx, DXx, DYx, DZx, E2x, E3x, E6x, E7x, EAx, EBx, EDx, EEx, EGx, EHx, EMx, FEx, FFx, FNx, FPx, FQx, FRx, FTx, FVx, FWx, H2x, H3x, H4x, J8x, JFx, JHx, JJx, JKx, K6x, K7x, KAx, KBx, KQx, L2x, L3x, L9x, LAx, LBx, LCx • 0659-CTO, 93x, 94x, 95x, 98x, 99x, 9Bx, H6x, H7x, H9x, HBx, HCx, HDx, HFx, JQx, JRx • 9455-CTO, 2Bx, 2Lx, 2Mx, 2Nx, 2Rx, 2Wx, 2Zx, 32x, 35x, 36x, 3Ax, 3Jx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 44x, 4Ax, 4Gx, 4Jx, 4Px, 4Qx, 7Ux, A9x, AAx, ABx, AFx, AGx, AHx, ALx, B6x, B7x, BCx, BDx, BRx, BUx, C4x, C7x, CCx, CDx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, K2x, K3x, LCx, LEx, LFx, LVx, MLx, MMx • 9456-CTO, 6Fx, 6Gx, 6Qx, 6Ux, DKx, DQx, DRx, E5x, EHx, EJx, EPx, EQx, EZx, F3x, F4x, FBx, FJx, FLx, FMx, FNx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, KLx, KMx, L2x, L4x, L5x, L6x, LAx, LBx, LHx, LKx, LYx, M2x, M4x, M5x, MUx, MVx • 9457-CTO, 74x, 75x, 7Dx, 7Ex, 7Kx, 7Lx, 7Vx, 8Bx, 8Cx, 8Kx, 8Lx, DSx, DVx, DWx, G2x, G4x, G5x, G8x, H2x, H7x, H8x, HBx, HCx, HDx, HEx, HFx, HHx, HJx, HKx, HMx, HNx, HPx, KDx, KEx, KHx, KJx, KNx, KQx, KRx, LSx • 9458-CTO, L7x, L8x, LLx • 9459-CTO, 74x, 8Kx, AWx, AXx, CUx, FYx, FZx, G2x, G4x, G5x, G9x, KKx, LTx • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 28x, 2Jx, 2Px, 2Tx, 2Ux, 32x, 33x, 3Ex, 3Mx, 3Rx, 3Sx, 3Ux, 3Wx, 3Xx, 89x, 8Dx, 8Gx, 8Jx, 9Px, A3x, A4x, A5x, A8x, A9x, AAx, ACx, AGx, AKx, ALx, AMx, ARx, ATx, AUx, B3x, B7x, B8x, B9x, BBx, BCx, BFx, BGx, BHx, BLx, BMx, BNx, BVx • 9461-CTO, 4Wx, 54x, 58x, 59x, 5Gx, 5Lx, C8x, C9x, CAx, DDx, DEx, DGx, DHx, DJx, DKx, DYx, M7x, M8x • 9462-CTO, 62x, 63x, 65x, 66x, 67x, 6Bx, 6Mx, 6Nx, 6Px, 6Rx, 6Sx, 6Tx, 6Ux, 6Yx, 6Zx, 72x, 75x, 76x, 79x, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 7Zx, 98x, 9Tx, 9Xx, E2x, E5x, E6x, E7x, E9x, EDx, EEx, EHx, EJx, EKx, ELx, F3x, F7x, F8x, FAx, FDx, FEx, FFx, G8x, G9x, HAx, KVx • 9463-CTO, HUx, LQx • 9464-CTO, 3Kx, 63x, 7Tx, 7Xx, 84x, BYx, BZx, CDx, CEx, DMx, G9x • 9446-CTO • 9447-CTO			
	HGST **OP**	42T1491	R	**
	Fujitsu	39T2885	R	**
	Toshiba	39T2713	R	**
	WD	42T1431	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
10	SATA hard disk drive, 80 GB, 9.5 mm, 5,400 rpm • 8942-CTO, 22x, 33x, 34x, 39x, 37x, 38x, 3Ax, 3Dx, 3Ex, 3Gx, 3Kx, 3Lx, 3Qx, 3Tx, 3Wx, 3Zx, 46x, 9Qx, 9Xx, 9Yx, A2x, A4x, A5x, AAx, ACx, ATx, AUx, AVx, AWx, AZx, B4x, B7x, BAx • 8943-CTO, 4Ax, 4Bx, 4Cx, 4Ex, 4Fx, 4Gx, 4Jx, 4Kx, 4Sx, 4Tx, 4Ux, 4Wx, 4Xx, 4Yx, 52x, 53x, 5Bx, 5Ex, 5Fx, 5Kx, 5Nx, 5Rx, 5Ux, 5Zx, 63x, 64x, A6x, A7x, A9x, ALx, APx, BBx, BCx, BDx, BFx, BGx, BHx, BKx, BMx, BNx, BPx, BQx, BSx, BTx, BUx, BWx, BXx, C4x, C7x, CAx • 8944-CTO, 6Ax, 6Bx, 66x, 67x, 6Cx, 6Dx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 73x, 76x, 77x, 7Bx, 7Dx, 7Cx, 7Gx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 9Ux, 9Vx, 9Wx, CBx, CCx, CDx, CEx, CFx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx • 8945-CTO, 7Ux, 7Vx, 7Yx, 7Zx, 84x, 85x, 88x, 89x, 8Dx, 8Gx, 8Hx, CRx, CSx, CUx, CVx • 8947-CTO, 8Kx, 8Mx, 8Px, 8Rx, 8Tx, 8Ux, 8Xx, 8Yx, 8Zx, 93x, 95x, 97x, 99x, 9Ax, 9Dx, 9Ex, 9Gx, 9Kx, 9Lx, CWx, CYx, D2x, D4x, D6x, D7x, D8x, DAx, DCx, DEx, DGx, DHx • 8948-CTO, 22x • 8949-CTO, 22x			
	HGST **OP**	42T1491	R	**
	Fujitsu	39T2885	R	**
	Seagate	42T1305	R	**
	SATA hard disk drive, 100 GB, 9.5 mm, 5,400 rpm • 9455-CTO, B2x, B3x, B4x, B5x, DPx • 9456-CTO, EDx, EEx, EFx, EGx • 9457-CTO, G7x • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO, GAx • 9463-CTO • 9464-CTO, GAx • 9446-CTO • 9447-CTO			
	HGST **OP**	42T1493	R	**
	Fujitsu	39T2887	R	**
	Toshiba	39T2715	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
10	SATA hard disk drive, 120 GB, 9.5 mm, 5,400 rpm • 0656-CTO • 0657-CTO, 3Rx, 3Sx, 42x, 43x, AEx, AZx, JYx, JUx, AFx, AGx, HRx, JXx, KJx, KNx, KTx, KUx, L4x, LJx, LLx, LMx • 0658-CTO, 6Zx, 72x, 73x, 74x, 7Bx, 7Cx, 7Dx, ECx, EFx, ENx, EQx, ERx, ESx, FSx, FUx, JEx, K8x, K9x • 0659-CTO, 96x, 97x, HAx, HGx • 9455-CTO, 23x, 2Xx, 2Yx, 4Hx, 7Tx, A2x, AKx, AMx, BJx, BLx,C3x, C5x, C6x, LWx • 9456-CTO, 6Px, 6Tx, 6Vx, 6Wx, E6x, E7x, ECx, F5x, F6x, FCx, LZx • 9457-CTO, 7Wx, 83x, 8Mx, DUx, H3x, HGx, HQx, HRx, J6x, J7x, JHx, JMx, JNx, G7x, KFx • 9458-CTO, LMx, LNx • 9459-CTO, ASx, CVx • 9444-CTO • 9445-CTO • 9460-CTO, 29x, 2Lx, 2Qx, 34x, 36x, 3Nx, 3Vx, 8Ax, 8Bx, 8Ex, 8Fx, A6x, A7x, AEx, AFx, AHx, AJx, ASx, B5x, B6x, BAx, BEx, BHx, BJx, BKx, HCx, HDx • 9461-CTO, 4Ax, 4Bx, 4Tx, 4Ux, 4Xx, 52x, 57X, 5Mx, 5Nx, D5x, D6x, D7x, DFx, DUx, DXx, DZx, H4x, H5x, HGx, HHx, HJx, HKx, HLx, HRx, HWx, HXx, HYx, M6x • 9462-CTO, 6Ex, 6Xx, 7Fx, 9Qx, 9Ux, F2x, FBx, FGx, GAx, H7x, HTx • 9463-CTO, HQx, HVx, LPx, LRx • 9464-CTO, CFx, GAx • 9446-CTO • 9447-CTO			
	HGST OP	42T1417	R	**
	HGST OP	42T1499	R	**
	Fujitsu	39T2889	R	**
	Toshiba	39T2791	R	**
	WD	42T1433	R	**
	SATA hard disk drive, 120 GB, 9.5 mm, 5,400 rpm • 8942-CTO, 35x, 36x, 3Bx, 3Cx, 3Mx, 47x, 48x, ABx, ADx • 8943-CTO, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 54x, 55x, 56x, 57x, 58x, 59x, 5Gx, 62x, 65x, 9Rx, 9Sx, 9Tx, AGx, AMx, ANx, AQx, ARx, ASx • 8944-CTO, 68x, 69x, 6Ex, 6Fx, 6Sx, 6Tx, 78x, 7Ax, 7Ex, 7Jx, 7Tx, AHx, AJx • 8945-CTO, 7Wx, 7Xx, 82x, 83x, 86x, 87x, 8Ax, 8Bx, 8Jx, AKx • 8947-CTO, 8Vx, 8Wx, 9Bx, 9Cx, 9Mx, 9Px • 8948-CTO • 8949-CTO			
	HGST OP	42T1417	R	**
	HGST OP	42T1499	R	**
	Fujitsu	39T2889	R	**
	Seagate	42T1307	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
10	SATA hard disk drive, 160 GB, 9.5 mm, 5,400 rpm • 8942-CTO, 49x, AEx, AFx • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO			
	HGST OP	42T1501	R	**
	Fujitsu	39T2899	R	**
	Seagate	42T1309	R	**
	SATA hard disk drive, 160 GB, 9.5 mm, 5400 rpm (FDE) • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	42T1311	R	**
	SATA hard disk drive, 60 GB, 9.5 mm, 7,200 rpm • 0656-CTO • 0657-CTO • 0658-CTO • 0659-CTO • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 2Hx, 2Nx, 2Sx, 3Dx, 3Gx, 3Qx • 9461-CTO • 9462-CTO, 6Lx, 7Lx, 9Sx, 9Wx, 9Zx • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO			
	HGST OP	42T1483	R	**
	Seagate	39T2795	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
10	SATA hard disk drive, 100GB, 9.5 mm, 7,200 rpm • 0656-CTO • 0657-CTO • 0658-CTO, 75x, 7Ex, 7Fx • 0659-CTO, 9Ax, HEx • 9455-CTO, 38x, 39x • 9456-CTO, 63x, 66x, EYx • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 2Mx, 2Rx, 3Lx, 3Px, AYx, B2x, HEx, HFx • 9461-CTO, 56x, HMx, HNx, KSx • 9462-CTO, 73x, 77x, 7Yx, 9Rx, 9Vx, KTx, KUx • 9463-CTO, HPx • 9464-CTO, 73x • 9446-CTO • 9447-CTO • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO			
	HGST **OP**	42T1485	R	**
	Seagate	39T2799	R	**
	SATA hard disk drive, 160 GB, 9.5 mm, 7,200 rpm • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO			
	HGST	42T1461	R	**
	Seagate	42T1439	R	**
	SATA hard disk drive, 200 GB, 9.5 mm, 7,200 rpm (FDE) • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	42T1463	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
11	Battery pack, Li-ion (6 cell, 2.4 Ah) • 8942-CTO, 22x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Gx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 46x, 47x, 48x, 49x, 9Qx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, A5x, AAx, ABx, ACx, ADx, AEx, AFx, ATx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx • 8943-CTO, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Vx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Bx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Zx, 62x, 63x, 64x, 65x, 9Rx, 9Sx, 9Tx, A6x, A7x, A8x, A9x, AGx, ALx, AMx, ANx, APx, AQx, ARx, ASx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx • 8944-CTO, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 73x, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Gx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 9Ux, 9Vx, 9Wx, AHx, AJx, CBx, CCx, CDx, CEx, CFx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx • 8945-CTO, 7Ux, 7Vx, 7Wx, 7Xx, 7Yx, 7Zx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Dx, 8Gx, 8Hx, 8Jx, AKx, CRx, CSx, CUx, CVx • 8947-CTO, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Rx, 8Sx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Gx, 9Kx, 9Lx, 9Mx, 9Px, CWx, CXx, CYx, CZx, D2x, D3x, D4x, D5x, D6x, D7x, D8x, D9x, DAx, DBx, DCx, DDx, DEx, DFx, DGx, DHx • 8948-CTO, 22x • 8949-CTO, 22x			
	Sanyo	42T4513	R	*
	Panosonic	42T5233	R	*
	Battery pack, Li-ion (6 cell, 2.6 Ah) • 0656-CTO, 22x, 23x, 24x, 25x, 26x, 29x, 2Cx, 2Dx, A3x, A4x • 0657-CTO, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 42x, 43x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, , 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 8Rx, 8Sx, 8Tx, 8Ux, 9Ex, 9Fx, 9Gx, 9Hx, A8x, A9x, AAx, ACx, ADx, AEx, AFx, AGx, ARx, ASx, ATx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CEx, HKx, HQx, HRx, HSx, HTx, HUx, HVx, J4x, J5x, J6x, JMx, JNx, JSx, JTx, JUx, JVx, JWx, JXx, JYx, JZx, K2x, K3x, K4x, K5x, KCx, KDx, KEx, KFx, KGx, KJx, KKx, KLx, KMx, KNx, KRx, KSx, KTx, KVx, KWx, KXx, KYx, KUx, LDx, LEx, LFx, LGx, LHx, LJx, LKx, LLx, LMx, LNx, LPx (continued)			
	Sanyo	42T4504	R	*
	Panasonic	92P1139	R	*
	Sony	92P1141	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
11	Battery pack, Li-ion (6 cell, 2.6 Ah) • 0658-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 72x, 73x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Ex, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Wx, 7Xx, 7Yx, 7Zx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 9Jx, 9Kx, 9Lx, 9Mx, 9Nx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, CTx, CUx, CVx, CWx, CXx, CYx, CZx, D2x, D3x, D4x, D5x, D6x, D7x, D8x, D9x, DAx, DBx, DCx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DLx, DMx, DNx, DPx, DQx, DRx, DSx, DTx, DUx, DVx, DWx, DXx, DYx, DZx, E2x, E3x, E4x, E5x, E6x, E7x, E8x, E9x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, F2x, F3x, F4x, F5x, F6x, F7x, F8x, F9x, FAx, FBx, FCx, FDx, FEx, FFx, FHx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, FXx, FYx, FZx, G3x, G4x, H2x, H3x, H4x, HLx, HMx, HNx, HPx, J7x, J8x, JEx, JFx, JGx, JHx, JJx, JKx, K6x, K7x, K8x, K9x, KAx, KBx, KPx, KQx, KZx, L2x, L3x, L4x, L5x, L6x, L7x, L8x, L9x, LAx, LBx, LCx • 0659-CTO, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Bx, 9Cx, 9Dx, H5x, H7x, H8x, H9x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, JPx, JQx, JRx • 9455-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 32x, 33x, 34x, 35x, 36x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 45x, 46x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px,4Qx, 4Rx, 7Tx, 7Ux, 7Xx, 7Yx, A2x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ABx, ACx, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BRx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, DPx, K2x, K3x, LCx, LDx, LEx, LFx, LUx, LVx, LWx, M9x, MAx, MBx, MCx, MDx, MEx, MFx, MGx, MHx, MJx, MKx, MLx, MMx • 9456-CTO, 54x, 59x, 5Ax, 5Bx, 5Dx, 5Ex, 5Gx, 5Hx, 5Jx, 5Kx, 5Mx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 63x, 68x, 6Ax, 6Dx, 6Ex, 6Fx, 6Gx, 6Jx, 6Kx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Zx, D9x, DJx, DKx, DLx, DMx, DQx, DRx, E5x, E6x, E7x, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EYx, EZx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, K9x, KAx, KLx, KMx, L2x, L3x, L4x, L5x, L6x, L9x, LAx, LBx, LGx, LHx, LJx, LKx, LUx, LVx, LWx, M2x, M4x, M5x, MNx, MPx, MQx, MRx, MSx, MTx, MUx, MVx (continued)			
	Sanyo	42T4504	R	*
	Panasonic	92P1139	R	*
	Sony	92P1141	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
11	Battery pack, Li-ion (6 cell, 2.6 Ah) • 9457-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Px, 7Vx, 7Wx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Wx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, DSx, DTx, DUx, DVx, DWx, G2x, G3x, G4x, G5x, G7x, G8x, H2x, H3x, H4x, H6x, H7x, H8x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, HHx, HJx, HKx, HMx, HNx, HPx, HQx, HRx, HSx, J3x, J6x, J7x, J9x, JAx, JBx, JDx, JFx, JGx, G6x, JHx, JJx, JKx, JLx, JMx, JNx, JPx, KDx, KEx, KFx, KGx, KHx, KJx, KNx, KPx, KQx, KRx • 9458-CTO, 7Mx, 8Qx, 8Rx, L7x, L8x, LLx, LMx, LNx • 9459-CTO, 74x, 7Gx, 7Px, 7Rx, 7Sx, 8Jx, 8Kx, 8Vx, 8Wx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, ASx, ATx, AUx, AVx, AWx, AXx, AZx, CUx, CVx, CXx, CYx, DNx, FXx, FYx, FZx, G2x, G3x, G4x, G5x, G6x, G9x, KKx • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 3Lx, 3Gx, 32x, 33x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Hx, 3Jx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Jx, 9Px, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HCx, HDx, HEx, HFx, HSx • 9461-CTO, 42x, 47x, 4Ax, 4Bx, 4Hx, 4Jx, 4Lx, 4Mx, , 4Sx, 4Tx, 4Ux, 4Vx, 4Wx, 4Xx, 52x, 54x, 57x, 58x, 59x, 5Bx, 5Cx, 5Ex, 5Fx, 5Gx, 5Kx, 5Lx, 5Mx, 5Nx, CKx, D5x, D6x, D7x, DGx, DHx, DJx, DKx, DUx, DXx, DYx, DZx, H4x, H5x, KSx, HGx, HHx, HKx, HLx, HMx, HNx, HRx, HWx, HXx, HYx, M6x, M7x, M8x • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 7Zx, 8Hx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, E2x, E4x, E5x, E6x, G8x, G9x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EHx, EJx, EKx, ELx, F2x, F3x, F4x, F7x, F8x, FAx, FBx, FCx, FDx, FEx, FFx, FGx, H7x, H8x, H9x, HAx, KTx, KUx, KVx, HTx • 9463-CTO, 7Rx, 82x, HPx. HQx, HUx, HVx, LPx, LQx, LRx • 9464-CTO, 3Kx, 63x, 69x, 6Wx, 73x, 7Bx, 7Tx, 7Vx, 7Xx, 84x, 86x, 88x, 92x, 93x, 94x, 95x, 96x, 97x, CDx, CEx, CFx, CGx, CHx, CJx, BYx, BZx, DLx, DMx, DNx, DPx, DSx, DVx, DWx, G9x • 9446-CTO • 9447-CTO • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO			
	Sanyo	42T4504	R	*
	Panasonic	92P1139	R	*
	Sony	92P1141	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
11	Battery pack, Li-ion (9 cell, 2.6 Ah) • 0656-CTO • 0657-CTO • 0658-CTO, 74x, 75x, 7Dx, 7Fx • 0659-CTO, 9Ax, H6x • 9455-CTO, 44x, CCx • 9456-CTO, 66x • 9457-CTO, LSx • 9458-CTO • 9459-CTO, LTx • 9444-CTO • 9445-CTO • 9460-CTO, 34x, AYx, B2x, HBx • 9461-CTO, 56x, C8x, C9x, CAx, DDx, DEx, DFx, HJx • 9462-CTO, 7Yx, GAx • 9463-CTO • 9464-CTO, GAx • 9446-CTO • 9447-CTO • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO			
	Sanyo	42T4511	R	*
	Panasonic	92P1133	R	*
12	CD drive, 12.7mm • 0656-CTO, 23x, 24x, 25x, 26x, 2Cx, 2Dx • 0657-CTO, 33x, 34x, 4Hx, 4Jx, G2x, BPx, BQx, BZx, C2x, C4x, C5x, CEx, G3x • 0658-CTO, 5Cx, 5Dx, 5Ex, 5Fx, 5Xx, 65x, 7Kx, 8Dx, 8Ex, DCx, DDx, DNx, DPx, F5x, F6x, FAx, FBx, FHx • 0659-CTO, H5x	39T2661	R	**
	CD drive, 12.7mm • 9455-CTO, 4Mx, ACx, BWx, BYx, MGx • 9456-CTO, 5Ux, 5Vx • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO, CKx • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	39T2661	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
12	DVD drive, 12.7 mm • 0656-CTO • 0657-CTO, LFx • 0658-CTO, 53x, 5Gx, 5Hx, 5Nx, 64x, 6Lx, 7Rx, 7Wx, 7Yx, 8Nx, E8x, EYx, FPx, HNx, HPx, L7x, L8x • 0659-CTO			
	PCC (UJDA770DVD)	39T2817	R	**
	MKE (SR-8178)	39T2663	R	**
	HLDS (GDR-T10N)	39T2665	R	**
	DVD drive, 12.7 mm • 9455-CTO, 2Sx, 2Tx, 4Ex, AQx • 9456-CTO • 9457-CTO, 7Ax, 7Bx, 88x, 89x • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 2Dx, 2Yx, 2Wx, 3Ax, AVx • 9461-CTO • 9462-CTO, 6Hx, 6Jx, 7Hx, 7Jx • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO			
	PCC (UJDA770DVD)	39T2817	R	*
	MKE (SR-8178)	39T2663	R	*
	HLDS (GDR-T10N)	39T2665	R	*
	DVD drive, 12.7 mm • 8944-CTO • 8942-CTO, 3Px, 3Sx, 3Vx, 3Yx, AYx, B3x, B6x, B9x • 8943-CTO, 5Jx, 5Mx, 5Qx, 5Tx, BZx, C3x, C6x, C9x • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO			
	HLDS (GDR-T10N)	39T2665	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
12	DVD/CD-RW combo drive, 12.7 mm • 0656-CTO, 22x, 29x, A3x, A4x • 0657-CTO, 35x, 36x, 38x, 3Ex, 3Fx, 3Gx, 3Kx, 3Nx, 3Tx, 3Ux, 45x, 46x, 47x, 49x, 4Ex, 4Gx, 4Kx, 4Nx, 4Px, A7x, AAx, ACx, ADx, AXx, AYx, B8x, B9x, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BTx, BUx, BVx, BWx, BXx, BYx, C3x, C6x, C7x, C8x, C9x, CAx, HQx, HTx, JYx, JZx, K2x, K3x, K4x, KSx, KVx, KWx, KXx, KYx, LHx, LJx, LKx, LLx, LMx • 0658-CTO, 52x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Px, 5Vx, 5Wx, 5Yx, 5Zx, 62x, 63x, 66x, 67x, 68x, 69x, 6Ax, 6Dx, 6Gx, 6Hx, 6Jx, 6Mx, 6Nx, 6Px, 6Qx, 6Tx, 6Ux, 6Wx, 6Xx, 6Yx, 72x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Gx, 7Hx, 7Jx, 7Mx, 7Nx, 7Px, 7Qx, 7Sx, 7Tx, 7Ux, 7Vx, 7Xx, 7Zx, 82x, 83x, 84x, 85x, 89x, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Mx, 8Px, 8Qx, CKx, CMx, CUx, CVx, D4x, D5x, D6x, D7x, D8x, D9x, DAx, DBx, DGx, DHx, DJx, DKx, DLx, DMx, DQx, DRx, DSx, DTx, DUx, DXx, E2x, E3x, E4x, E5x, E6x, E7x, E9x, EDx, EEx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EQx, ERx, ETx, EUx, EVx, EWx, EXx, EZx, F2x, F7x, F8x, F9x, FCx, FDx, FNx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, FXx, FYx, FZx, G4x, H4x, HLx, HMx, J7x, J8x, JGx, K6x, K7x, K9x, KAx, KBx, KPx, KZx, L2x, L3x, L4x, L5x, L6x, L9x, LAx, LBx, LCx • 0659-CTO, 92x, 94x, 95x, 97x, 98x, 99x, 9Bx, 9Cx, 9Dx, H6x, H7x, H8x, HFx, JPx			
	PCC (UJDA770)	39T2667	R	**
	HLDS (GCC-T10N)	39T2669	R	**
	DVD/CD-RW combo drive, 12.7 mm • 9455-CTO, 22x, 24x, 25x, 26x, 27x, 28x, 2Cx, 2Ex, 2Fx, 2Gx, 2Kx, 2Lx, 2Px, 2Qx, 2Rx, 2Ux, 2Vx, 2Wx, 2Xx, 2Zx, 33x, 34x, 3Ax, 3Bx, 3Cx, 3Dx, 3Fx, 3Kx, 3Lx, 3Mx, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 48x, 4Bx, 4Cx, 4Dx, 4Fx, 4Gx, 4Jx, 4Rx, 7Ux, 7Xx, 7Yx, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ABx, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, ARx, B8x, B9x, BAx, BBx, BEx, BFx, BGx, BHx, BRx, BVx, BXx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CQx, CRx, CSx, K2x, K3x, LDx, LFx, LUx, LVx, LWx, M9x, MAx, MBx, MCx, MDx, MEx, MFx, MHx, MJx, MKx • 9456-CTO, 54x, 59x, 5Bx, 5Dx, 5Ex, 5Gx, 5Hx, 5Rx, 5Sx, 68x, 6Dx, 6Ex, 6Kx, 6Nx, 6Rx, 6Ux, 6Xx, D9x, DJx, DKx, DLx, DMx, EKx, ELx, EMx, ENx, ERx, ESx, ETx, EUx, F3x, FAx, FBx, FMx, FNx, FPx, FQx, L3x, L6x, L9x, LGx, LHx, LJx, LXx, LYx, LZx, MNx, MPx, MQx, MRx, MSx, MTx • 9457-CTO, 72x, 73x, 77x, 78x, 7Cx, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Px, 7Vx, 7Wx, 82x, 84x, 85x, 86x, 8Ax, 8Ex, 8Gx, 8Hx, 8Jx, 8Nx, 8Px, 92x, 93x, 94x, 95x, 96x, 97x, 98x, DTx, G2x, G3x, G4x, G5x, G8x, H2x, H4x, H6x, H7x, H8x, HAx, HBx, HCx, HDx, HGx, HHx, HJx, HKx, HNx, HPx, HSx, J3x, J9x, JAx, JBx, JDx, JFx, JGx, JJx, JKx, JLx, JMx, JPx, KDx, KGx, KHx, KPx, LSx • 9458-CTO, 7Mx, 8Qx, 8Rx • 9459-CTO, 7Gx, 7Px, 7Rx, 7Sx, 8Jx, 8Vx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 9Ax, ATx, AUx, AVx, AWx, AXx, AZx, CUx, CXx, CYx, DNx, FXx, FYx, FZx, G2x, G3x, G4x, G5x, G9x, LTx • 9444-CTO • 9445-CTO (continued)			
	PCC (UJDA770)	39T2667	R	*
	HLDS (GCC-T10N)	39T2669	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
12	DVD/CD-RW combo drive, 12.7 mm • 9460-CTO, 24x, 26x, 29x, 2Ax, 2Bx, 2Cx, 2Ex, 2Fx, 2Gx, 2Hx, 2Kx, 2Px, 2Tx, 2Ux, 2Vx, 2Xx, 2Zx, 33x, 35x, 36x, 37x, 38x, 39x, 3Bx, 3Cx, 3Dx, 3Hx, 3Jx, 3Mx, 3Rx, 3Sx, 3Tx, 3Ux, 3Wx, 89x, 8Ax, 8Cx, 8Dx, 8Ex, 8Gx, A7x, A8x, AEx, AFx, AHx, AJx, AKx, ALx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AWx, B7x, BAx, BBx, BCx, BEx, BJx, BKx, BLx, BMx, BRx, BSx, BUx, BVx, BWx, HEx, HFx, HSx • 9461-CTO, 42x, 47x, 4Hx, 4Jx, 4Lx, 4Mx, 4Sx, 4Vx, 4Wx, 5Bx, 5Cx, 5Kx, C8x, C9x, CAx, DDx, DGx, HMx, HNx • 9462-CTO, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Gx, 6Lx, 6Px, 6Qx, 6Tx, 6Vx, 6Wx, 6Yx, 6Zx, 74x, 76x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Gx, 7Lx, 7Qx, 7Xx, 7Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 9Tx, 9Xx, 9Yx, E2x, E4x, E6x, E7x, E9x, EAx, EBx, ECx, EEx, EJx, F3x, F4x, F8x, FCx, FFx, G8x, G9x, H8x • 9463-CTO, 7Rx, 82x • 9464-CTO, 3Kx, 69x, 6Wx, 7Bx, 7Vx, 7Xx, 86x, 88x, 92x, 93x, 94x, 95x, 96x, 97x, BZx, CEx, CFx, CGx, CHx, CJx, DLx, DMx, DNx, DPx, DSx, DVx, DWx, G9x • 9446-CTO • 9447-CTO			
	PCC (UJDA770)	39T2667	R	*
	HLDS (GCC-T10N)	39T2669	R	*
	DVD/CD-RW combo drive, 12.7 mm • 8942-CTO, 22x, 32x, 33x, 34x, 39x, 3Ax, 3Nx, 3Rx, 3Ux, 3Xx, 46x, 47x, 48x, 9Zx, A3x, A5x, AAx, ABx, ACx, AEx, ATx, AUx, AVx, AWx, AXx, B2x, B5x, B8x • 8943-CTO, 4Bx, 4Dx, 4Fx, 4Hx, 4Tx, 4Vx, 4Xx, 4Zx, 5Hx, 5Lx, 5Px, 5Sx, A8x, ALx, AMx, APx, AQx, ARx, BCx, BEx, BGx, BJx, BPx, BRx, BTx, BVx, BYx, C2x, C5x, C8x • 8944-CTO, 66x, 6Ax, 6Bx, 6Cx, 6Dx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Wx, 6Xx, 6Yx, 6Zx, 7Ax, 7Bx, 7Dx, 7Kx, CBx, CCx, CDx, CEx, CFx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx • 8945-CTO, 7Ux, 7Yx, 84x, 88x, CRx, CUx • 8947-CTO, 8Lx, 8Nx, 8Qx, 8Sx, 8Tx, 8Ux, 92x, 94x, 96x, 98x, 99x, 9Ax, 9Px, CXx, CZx, D3x, D5x, D6x, D7x, D9x, DBx, DDx, DFx, DGx, DHx • 8948-CTO, 22x • 8949-CTO, 22x			
	HLDS (GCC-T10N)	39T2669	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
12	DVD-RAM/RW drive, 12.7 mm • 0656-CTO • 0657-CTO, 37x, 39x, 3Ax, 3Bx, 3Cx, 3Hx, 3Jx, 3Lx, 3Mx, 3Rx, 3Sx, 3Vx, 3Wx, 3Xx, 42x, 43x, 48x, 4Ax, 4Dx, 4Fx, 4Lx, 4Mx, 4Qx, 4Rx, 4Sx, 4Tx, A8x, A9x, AEx, AFx, AGx, ARx, ASx, ATx, AUx, AVx, AWx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, BAx, BBx, BCx, BDx, BEx, BRx, BSx, CBx, CCx, HKx, HRx, HSx, HUx, HVx, J4x, J5x, J6x, JMx, JNx, JSx, JTx, JUx, JVx, JWx, JXx, K5x, KCx, KDx, KEx, KFx, KGx, KJx, KKx, KLx, KMx, KNx, KRx, KTx, KUx, LDx, LEx, LGx, LNx, LPx • 0658-CTO, 5Jx, 5Kx, 5Lx, 5Mx, 5Qx, 5Rx, 5Sx, 5Tx, 6Bx, 6Cx, 6Ex, 6Kx, 6Rx, 6Sx, 6Vx, 6Zx, 73x, 74x, 75x, 7Cx, 7Dx, 7Ex, 7Fx, 7Lx, 86x, 87x, 88x, 8Ax, 8Bx, 8Cx, 8Lx, CLx, CNx, CPx, CQx, CRx, CSx, CTx, CWx, CXx, CYx, CZx, D2x, D3x, DEx, DFx, DVx, DWx, DYx, DZx, EAx, EBx, ECx, EFx, ESx, F3x, F4x, FEx, FFx, H2x, H3x, JEx, JFx, JHx, JJx, JKx, K8x, KQx • 0659-CTO, 93x, 96x, 9Ax, H9x, HAx, HBx, HCx, HDx, HEx, HGx, JQx, JRx			
	PCC (UJ-850)	39T2721	R	**
	HLDS (GMA-4082N)	39T2723	R	**
	DVD-RAM/RW drive, 12.7 mm • 9455-CTO, 23x, 29x, 2Ax, 2Bx, 2Dx, 2Jx, 2Mx, 2Nx, 2Yx, 32x, 35x, 36x, 38x, 39x, 3Ex, 3Gx, 3Hx, 3Jx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 45x, 46x, 49x, 4Ax, 4Hx, 4Kx, 4Nx, 4Px, 4Qx, 7Tx, A2x, B2x, B3x, B4x, B5x, B6x, B7x, BCx, BDx, BJx, BLx, BUx, CJx, CKx, CLx, CMx, CNx, CPx, DPx, LCx, LEx, MLx, MMx • 9456-CTO, 5Ax, 5Jx, 5Kx, 5Mx, 63x, 66x, 6Ax, 6Fx, 6Gx, 6Jx, 6Px, 6Qx, 6Sx, 6Tx, 6Vx, 6Wx, 6Zx, DQx, DRx, E5x, E6x, E7x, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EPx, EQx, EYx, EZx, F4x, F5x, F6x, FCx, FJx, FKx, FLx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, K9x, KAx, KLx, KMx, L2x, L4x, L5x, LAx, LBx, LKx, M2x, M4x, M5x, MUx, MVx • 9457-CTO, 74x, 75x, 76x, 79x, 7Dx, 7Ex, 83x, 87x, 8Bx, 8Cx, 8Kx, 8Lx, 8Mx, DSx, DUx, DVx, DWx, G6x, G7x, H3x, HEx, HFx, HMx, HQx, HRx, J6x, J7x, JHx, JNx, KEx, KFx, KJx, KNx, KQx, KRx • 9458-CTO, L7x, L8x, LLx, LMx, LNx • 9459-CTO, 74x, 8Kx, 8Wx, ASx, CVx, G6x, KKx • 9444-CTO • 9459-CTO (continued)			
	PCC (UJ-850)	39T2721	R	*
	HLDS (GMA-4082N)	39T2723	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
12	DVD-RAM/RW drive, 12.7 mm • 9460-CTO, 22x, 23x, 25x, 27x, 28x, 2Jx, 2Lx, 2Mx, 2Nx, 2Qx, 2Rx, 2Sx, 32x, 34x, 3Ex, 3Fx, 3Gx, 3Lx, 3Nx, 3Px, 3Qx, 3Vx, 3Xx, 8Bx, 8Fx 8Jx, 9Px, A3x, A4x, A5x, A6x, A9x, AAx, ACx, AGx, AMx, AYx, B2x, B3x, B5x, B6x, B8x, B9x, BDx, BFx, BGx, BHx, BNx, BPx, BQx, H3x, HBx, HCx, HDx • 9461-CTO, 4Ax, 4Bx, 4Tx, 4Ux, 4Xx, 52x, 54x, 56x, 57x, 58x, 59x, 5Ex, 5Fx, 5Gx, 5Lx, 5Mx, 5Nx, D5x, D6x, D7x, DEx, DFx, DHx, DJx, DKx, DUx, DXx, DYx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HLx, HRx, HWx, HX, HYx, M6x, M7x, M8x • 9462-CTO, 62x, 63x, 66x, 6Ex, 6Kx, 6Mx, 6Nx, 6Rx, 6Sx, 6Ux, 6Xx, 72x, 73x, 75x, 77x, 79x, 7Ex, 7Fx, 7Kx, 7Mx, 7Nx, 7Px, 7Yx, 8Hx, 9Qx, 9Rx, 9Sx, 9Ux, 9Vx, 9Wx, 9Zx, E5x, EDx, EHx, EKx, ELx, F2x, F7x, FAx, FBx, FDx, FEx, FGx, GAx, H7x, H9x, HAx, KTx, KUx, KVx, HTx • 9463-CTO, HPx, HQx, HUx, HVx, LPx, LQx, LRx • 9464-CTO, 63x, 73x, 7Tx, 84x, CDx, BYx, GAx • 9446-CTO • 9447-CTO			
	PCC (UJ-850)	39T2721	R	*
	HLDS (GMA-4082N)	39T2723	R	*
	DVD-RAM/RW drive, 12.7 mm • 8942-CTO, 35x, 36x, 37x, 38x, 3Bx, 3Cx, 3Dx, 3Ex, 3Gx, 3Kx, 3Lx, 3Mx, 3Qx, 3Tx, 3Wx, 3Zx, 49x, 9Qx, 9Xx, 9Yx, A2x, A4x, ADx, AFx, AZx, B4x, B7x, BAx • 8943-CTO, 4Ax, 4Cx, 4Ex, 4Gx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Ux, 4Wx, 4Yx, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Bx, 5Ex, 5Kx, 5Fx, 5Gx, 5Nx, 5Rx, 5Ux, 5Zx, 62x, 63x, 64x, 65x, 9Rx, 9Sx, 9Tx, A6x, A7x, A9x, AGx, ANx, ASx, BBx, BDx, BFx, BHx, BKx, BMx, BNx, BQx, BSx, BUx, BWx, BXx, C4x, C7x, CAx • 8944-CTO, 67x, 68x, 69x, 6Ex, 6Fx, 6Gx, 6Hx, 6Sx, 6Tx, 6Ux, 6Vx, 73x, 76x, 77x, 78x, 7Cx, 7Ex, 7Gx, 7Jx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 9Ux, 9Vx, 9Wx, AHx, AJx • 8945-CTO, 7Vx, 7Wx, 7Xx, 7Zx, 82x, 83x, 85x, 86x, 87x, 89x, 8Ax, 8Bx, 8Dx, 8Gx, 8Hx, 8Jx, AKx, CSx, CVx • 8947-CTO, 8Kx, 8Mx, 8Px, 8Rx, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 93x, 95x, 97x, 9Bx, 9Cx, 9Dx, 9Ex, 9Gx, 9Kx, 9Lx, 9Mx, CWx, CYx, D2x, D4x, D8x, DAx, DCx, DEx • 8948-CTO • 8949-CTO			
	PCC (UJ-860)	39T2861	R	*
	HLDS (GSA-T20N)	39T2863	R	*
	Travel cover, 12.7 mm	13N5354	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
13	Hard disk drive cover assembly (14.1-in.) • 9455-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 7Tx, 7Ux, 7Xx, 7Yx, A2x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ABx, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, K2x, M9x, MAx, MBx, MCx, MDx, MEx • 9456-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, D4x, D5x, D6x, D9x, DFx, DGx, DHx, DJx, DKx, DLx, DMx, K9x, LAx, M2x, M4x, M5x, MNx, MPx, MQx • 9457-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Px, 7Vx, 7Wx, 92x, 93x, G2x, G3x, G8x, H2x, H3x, H4x, H6x, H7x, H8x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, HHx, HJx, HKx, HLx, HMx, HNx, HPx, HQx, HRx, KGx, KHx, KJx • 9458-CTO, 7Mx, L7x, LLx, LMx • 9459-CTO, 74x, 7Gx, 7Px, 7Sx, 7Rx, 92x, 93x, 99x, 9Ax, 9Bx, ASx, ATx, AUx, AVx, AWx, AXx, AZx, G2x, G3x, G9x • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Jx, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AYx, HDx, HFx, HSx (continued)	41W5164	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
13	Hard disk drive cover assembly (14.1-in.) • 9461-CTO, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Vx, 4Wx, 4Xx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CKx, M6x, M7x, M8x • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Dx, 6Cx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 8Hx, 92x, 93x, 94x, E2x, E4x, E5x, E6x, G8x, G9x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EGx, EHx, EJx, EKx, ELx, H8x, H9x, HAx, KTx, KVx, HTx • 9463-CTO, 82x, HPx, LPx, LQx, LRx • 9464-CTO, 63x, 69x, 6Wx, 84x, 86x, 88x, 92x, 93x, 94x, CDx, CEx, CFx, CGx, CHx, CJx, G9x • 9446-CTO • 9447-CTO	41W5164	R	*
	Hard disk drive cover assembly (15.0-in.) • 0656-all • 0657-all • 0658-all • 0659-all • 9455-CTO, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x,, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, ACx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BQx, BRx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, DPx, K3x, LCx, LDx, LEx, LFx, LUx, LVx, LWx, MFx, MGx, MHx, MJx, MKx, MLx, MMx • 9456-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, DQx, DRx, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, KAx, KLx, KMx, L2x, L3x, L4x, L5x, L6x, L9x, LBx, LGx, LHx, LJx, LKx, LXx, LYx, LZx, MRx, MSx, MTx, MUx, MVx (continued)	42X4376	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
13	Hard disk drive cover assembly (15.0-in.) • 9457-CTO, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Wx, 94x, 95x, 96x, 97x, 98x, DSx, DTx, DUx, DVx, DWx, G4x, G5x, G6x, G7x, J3x, J6x, J7x, J9x, JAx, JBx, JDx, JFx, JGx, JHx, JJx, JKx, JLx, JMx, JNx, JPx, KDx, KEx, KFx, KNx, KPx, KQx, KRx, LSx • 9458-CTO, 8Qx, 8Rx, L8x, LNx • 9459-CTO, 8Jx, 8Kx, 8Vx, 8Wx, 94x, 95x, 96x, 97x, 98x, CUx, CVx, CXx, CYx, DNx, FXx, FYx, FZx, G4x, G5x, G6x, KKx, LTx • 9444-CTO • 9445-CTO • 9460-CTO, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 9Px, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HCx, HEx • 9461-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, D2x, D3x, D4x, D5x, D6x, D7x, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DUx, DXx, DYx, DZx, H4x, H5x, KSx, HWx, HXx, HYx • 9462-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx,7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 7Yx, 7Zx, 95x, 96x, 97x, 98x, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, F2x, F3x, F4x, F7x, F8x, FAx, FBx, FCx, FDx, FEx, FFx, FGx, GAx, H7x, KUx • 9463-CTO, 7Rx, HQx, HUx, HVx • 9464-CTO, 3Kx, 73x, 7Bx, 7Tx, 7Vx, 7Xx, 95x, 96x, 97x, BYx, BZx, DLx, DMx, DNx, DPx, DSx, DVx, DWx, GAx • 9446-CTO • 9447-CTO • 8942-all • 8943-all • 8944-all • 8945-all • 8947-all • 8948-all • 8949-all	42X4376	R	*
14	Base cover assembly for 0656	41W5199	R	N
	Base cover assembly for 0657	41W5203	R	N
	Base cover assembly for 0658	41W5178	R	N
	Base cover assembly for 0659	41W5179	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
14	Base cover assembly for 9455 (14.1-in.)	41W5166	R	N
	Base cover assembly for 9455 (15.0-in.)	41W5172	R	N
	Base cover assembly for 9456 (14.1-in.)	41W5191	R	N
	Base cover assembly for 9456 (15.0-in.)	41W5195	R	N
	Base cover assembly for 9457 (14.1-in.)	41W5167	R	N
	Base cover assembly for 9457 (15.0-in.)	41W5173	R	N
	Base cover assembly for 9458 (14.1-in.)	41W5192	R	N
	Base cover assembly for 9458 (15.0-in.)	41W5196	R	N
	Base cover assembly for 9459 (14.1-in.)	41W5168	R	N
	Base cover assembly for 9459 (15.0-in.)	41W5174	R	N
	Base cover assembly for 9444 (14.1-in.)	42X4885	R	N
	Base cover assembly for 9444 (15.0-in.)	42X4886	R	N
	Base cover assembly for 9445 (14.1-in.)	42X4887	R	N
	Base cover assembly for 9445 (15.0-in.)	42X4888	R	N
	Base cover assembly for 9460 (14.1-in.)	41W5169	R	N
	Base cover assembly for 9460 (15.0-in.)	41W5175	R	N
	Base cover assembly for 9461 (14.1-in.)	41W5193	R	N
	Base cover assembly for 9461 (15.0-in.)	41W5197	R	N
	Base cover assembly for 9462 (14.1-in.)	41W5170	R	N
	Base cover assembly for 9462 (15.0-in.)	41W5176	R	N
	Base cover assembly for 9463 (14.1-in.)	41W5194	R	N
	Base cover assembly for 9463 (15.0-in.)	41W5198	R	N
	Base cover assembly for 9464 (14.1-in.)	41W5171	R	N
	Base cover assembly for 9464 (15.0-in.)	41W5177	R	N
	Base cover assembly for 9446 (14.1-in.)	42X4889	R	N
	Base cover assembly for 9446 (15.0-in.)	42X4890	R	N
	Base cover assembly for 9447 (14.1-in.)	42X4891	R	N
	Base cover assembly for 9447 (15.0-in.)	42X4892	R	N
	Base cover assembly for 8942	42X4377	R	N
	Base cover assembly for 8943	42X4378	R	N
	Base cover assembly for 8944	42X4379	R	N
	Base cover assembly for 8945	42X4380	R	N
	Base cover assembly for 8947	42X4381	R	N
	Base cover assembly for 8948	42X4382	R	N
	Base cover assembly for 8949	42X4383	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
15	2-GB DDR2-533 SDRAM SO-DIMM (PC2-4200) card • 0656-CTO • 0657-CTO • 0658-CTO • 0659-CTO, HBx • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	73P3847	R	**
	256-MB DDR2-667 SDRAM SO-DIMM (PC2-5300) card • 0656-CTO, 22x, 23x, 24x, 25x, 26x, 2Cx, 2Dx, A3x • 0657-CTO, 33x, 34x, 35x, 36x, 38x, 3Ex, 3Fx, 3Tx, 45x, 46x, 4Ex, 4Gx, 4Hx, 4Jx, 4Kx, 4Nx, 4Px, 8Rx, 8Sx, BPx, BQx, BXx, BYx, BZx, C2x, C4x, C5x, C6x, C7x, CEx • 0658-CTO, 53x, 54x, 55x, 56x, 57x, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Nx, 5Px, 5Vx, 5Wx, 5Xx, 5Yx, 63x, 65x, 66x, 67x, 6Jx, 6Lx, 6Mx, 6Nx, 6Rx, 6Sx, 6Tx, 6Ux, 76x, 7Kx, 7Px, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Wx, 7Xx, 7Yx, 7Zx, 8Dx, 8Ex, 8Nx, 8Px, 8Qx, DCx, DDx, DLx, DMx, DNx, DPx, DQx, DRx, DSx, DTx, DUx, DVx, DWx, DXx, DYx, DZx, E2x, E3x, E4x, E8x, E9x, EGx, EHx, EJx, EKx, ELx, ETx, EXx, F5x, F6x, F7x, F8x, FAx, FBx, FHx, FPx, FQx, FVx, FZx, G3x • 0659-CTO,9Cx, H5x • 9455-CTO, 24x, 25x, 26x, 28x, 2Cx, 2Ex, 2Fx, 2Gx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Sx, 2Tx, 2Ux, 3Bx, 3Fx, 3Lx, 3Mx, 3Sx, 3Tx, 3Xx, 3Yx, 3Zx, 42x, 4Cx, 4Ex, 4Fx, 4Mx, 7Yx, A6x, A7x, A8x, ACx, ADx, AJx, AKx, ANx, APx, AQx, ATx, BWx, BYx, BZx, C2x, CEx, CGx, CHx, CNx, CPx • 9456-CTO, 59x, 5Bx, 5Dx, 5Ex, 5Kx, 5Rx, 5Sx, 5Ux,6Ax, 6Jx, 6Nx, 6Rx, D9x, DLx, DMx, FAx, FPx, FQx, FVx, FWx • 9457-CTO, 7Kx, 7Lx, H7x, H8x, HHx, HKx • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 3Hx, AKx, AQx, ATx, BSx • 9461-CTO, 42x, 47x, 4Hx, 4Jx, 4Lx, 4Mx, 5Bx, 5Cx • 9462-CTO (continued)	40Y8401	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
15	256-MB DDR2-667 SDRAM SO-DIMM (PC2-5300) card • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	40Y8401	R	**
	512-MB DDR2-667 SDRAM SO-DIMM (PC2-5300) card • 0656-CTO, 29x, A4x • 0657-CTO, 37x, 39x, 3Ax, 3Bx, 3Cx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Rx, 3Sx, 3Ux, 3Wx, 42x, 43x, 47x, 48x, 49x, 4Ax, 4Dx, 4Fx, 4Lx, 4Mx, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 8Tx, 8Ux, 9Ex, 9Fx, 9Gx, 9Hx, A8x, A9x, AAx, ACx, ADx, AEx, AFx, AGx, ARx, ASx, ATx, AUx, AVx, AWx, AXx, AYx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BRx, BSx, BTx, BUx, BVx, BWx, C3x, C8x, C9x, CAx, CBx, CCx, HKx, HQx, HRx, HSx, HTx, HUx, HVx, J4x, J5x, J6x, JMx, JNx, JSx, JTx, JUx, JVx, JWx, JXx, JYx, JZx, K2x, K3x, K4x, K5x, KCx, KDx, KEx, KFx, KGx, KKx, KLx, KMx, KNx, KRx, KSx, KVx, KWx, KXx, KYx, LDx, LEx, LFx, LGx, LHx, LJx, LKx, LLx, LMx, LNx, LPx • 0658-CTO, 52x, 58x, 59x, 5Ax, 5Bx, 5Jx, 5Kx, 5Lx, 5Mx, 5Qx, 5Rx, 5Sx, 5Tx, 5Zx, 62x, 64x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Gx, 6Hx, 6Kx, 6Px, 6Qx, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 72x, 73x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Ex, 7Gx, 7Hx, 7Jx, 7Lx, 7Mx, 7Nx, 7Qx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 9Jx, 9Kx, 9Lx, 9Mx, 9Nx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, CTx, CUx, CVx, CWx, CXx, CYx, CZx, D2x, D3x, D4x, D5x, D6x, D7x, D8x, D9x, DAx, DBx, DEx, DFx, DGx, DHx, DJx, DKx, E5x, E6x, E7x, EAx, EBx, EDx, EEx, EMx, ENx, EQx, ERx, EUx, EVx, EWx, EYx, EZx, F2x, F3x, F4x, F9x, FCx, FDx, FEx, FFx, FNx, FRx, FSx, FTx, FUx, FWx, FXx, FYx, G4x, H2x, H3x, H4x, HLx, HMx, HNx, HPx, J7x, J8x, JEx, JFx, JGx, JHx, JJx, JKx, K6x, K7x, K8x, K9x, KAx, KBx, KPx, KQx, KZx, L2x, L3x, L4x, L5x, L6x, L7x, L8x, L9x, LAx, LBx, LCx • 0659-CTO, 92x, 93x, 94x, 95x, 96x, 97x, 99x, 9Bx, 9Dx, H7x, H8x, H9x, HAx, HCx, HDx, HFx, JRx • 9455-CTO, 22x, 27x, 29x, 2Ax, 2Bx, 2Dx, 2Jx, 2Kx, 2Rx, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 32x, 33x, 34x, 35x, 36x, 3Ax, 3Cx, 3Dx, 3Ex, 3Gx, 3Hx, 3Jx, 3Kx, 3Nx, 3Px, 3Qx, 3Rx, 3Vx, 3Wx, 43x, 44x, 45x, 46x, 48x, 49x, 4Ax, 4Bx, 4Dx, 4Gx, 4Jx, 4Kx, 4Lx, 4Nx, 4Px, 4Qx, 4Rx, 7Ux, 7Xx, A4x, A5x, A9x, AAx, ABx, AEx, AFx, AGx, AHx, AKx, ALx, AMx, ARx, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BRx, BUx, BVx, BXx, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CJx, CKx, CLx, CMx, CQx, CRx, CSx, K2x, K3x, LCx, LDx, LEx, LFx, LUx, M9x, MAx, MBx, MCx, MDx, MEx, MFx, MGx, MHx, MJx, MKx, MLx, MMx (continued)	40Y8402	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
15	512-MB DDR2-667 SDRAM SO-DIMM (PC2-5300) card • 9456-CTO, 54x, 5Ax, 5Gx, 5Hx, 5Jx, 5Mx, 5Tx, 5Vx, 68x, 6Dx, 6Ex, 6Fx, 6Gx, 6Kx, 6Qx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Zx, DJx, DKx, DQx, DRx, E5x, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EZx, F3x, F4x, F5x, FBx, FCx, FJx, FKx, FLx, FMx, FNx, FRx, FSx, FTx, FUx, HTx, K8x, K9x, KAx, KLx, KMx, L2z, L3x, L5x, L6x, L9x, LAx, LBx, LGx, LHx, LJx, LKx, LXx, M2x, M4x, M5x, MNx, MPx, MQx, MRx, MSx, MTx, MUx, MVx • 9457-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Px, 7Vx, 7Wx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Hx 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Wx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, DSx, DTx, DVx, G2x, G3x, G4x, G5x, G6x, G7x, G8x, H2x, H4x, H6x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, HJx, HMx, HNx, HPx, HSx, J3x, J9x, JAx, JBx, JDx, JFx, JGx, JJx, JKx, JLx, JPx, KDx, KEx, KFx, KGx, KHx, KJx, KNx, KPx, KQx, KRx • 9458-CTO, 7Mx, 8Qx, 8Rx, L7x, LLx, LMx, LNx • 9459-CTO, 74x, 7Gx, 7Px, 7Rx, 7Sx, 8Jx, 8Kx, 8Vx, 8Wx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx ATx, AUx AVx, AWx, AXx, AZx, CUx, CXx, CYx, DNx, FXx, FYx, FZx, G2x, G3x, G4x, G5x, G6x, G9x, KKx • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Nx, 2Px, 2Qx, 2Sx, 2Tx, 2Ux, 32x, 33x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Jx, 3Mx, 3Nx, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Wx, 3Xx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Gx, 8Jx, 9Px, A3x, A4x, A5x, A7x, A8x, A9x, AAx, ACx, AEx, AFx, AGx, AHx, AJx, ALx, AMx, ANx, APx, ARx, ASx, AUx, AVx, AWx, B3x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BUx, BVx, BWx, H3x, HBx, HCx, HDx, HEx, HFx, HSx • 9461-CTO, 4Ax, 4Bx, 4Nx, 4Sx, 4Tx, 4Ux, 4Vx, 4Wx, 4Xx, 52x, 54x, 57x, 58x, 59x, 5Ex, 5Fx, 5Gx, 5Kx, 5Lx, 5Mx, 5Nx, CKx, DGx, DHx, DJx, DKx, DYx, DZx, KSx, HGx, HJx, HKx, HLx, HMx, HNx, HXx, M6x, M7x, M8x (continued)	40Y8402	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
15	512-MB DDR2-667 SDRAM SO-DIMM (PC2-5300) card • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 72x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 7Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 9Qx, 9Sx, 9Tx, 9Ux, 9Wx, 9Xx, 9Yx, 9Zx,E2x, E4x, E5x, E6x, E7x, E8x, E9x, EAx, EBx, ECx, EDx, EEx, EJx, ELx, F3x, F4x, F7x, F8x, FAx, FCx, FDx, FEx, FFx, GAx, G8x, H8x, H9x, HAx, KVx, HTx • 9463-CTO, 7Rx, 82x, LPx, LQx • 9464-CTO, 3Kx, 63x, 69x, 6Wx, 7Bx, 7Tx, 7Vx, 7Xx, 84x, 86x, 88x, 92x, 93x, 94x, 95x, 96x, 97x, BYx, BZx, CDx, CEx, CFx, CGx, CHx, CJx, DLx, DMx, DNx, DPx, DSx, DVx, DWx, GAx • 9446-CTO • 9447-CTO • 8942-CTO, 22x, 32x, 33x, 34x, 39x, 3Ax, 3Gx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 46x, 47x, 9Qx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, A5x, AAx • 8943-CTO, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Sx, 4Tx, 4Ux, 4Vx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Bx, 5Ex, 5Fx, 5Gx, 5Zx, 62x, 63x, 64x, 65x, 9Rx, 9Sx, 9Tx, A6x, A7x, A8x, A9x • 8944-CTO, 66x, 67x, 68x, 6Ax, 6Bx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Wx, 6Xx, 6Yx, 6Zx, 73x, 76x, 77x, 78x, 7Bx, 7Cx, 7Dx, 7Ex, 7Gx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 9Ux, 9Vx, 9Wx, AHx • 8945-CTO, 7Ux, 7Vx, 84x, 85x, 8Dx, 8Gx, 8Hx, 8Jx • 8947-CTO, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Rx, 8Sx, 8Tx, 8Ux, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Gx, 9Kx, 9Lx, 9Mx • 8948-CTO, 22x • 8949-CTO, 22x	40Y8402	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
15	1-GB DDR2-667 SDRAM SO-DIMM (PC2-5300) card • 0656-CTO • 0657-CTO, 3Vx, 3Xx, AZx, KJx, KTx, KUx • 0658-CTO, 74x, 75x, 7Dx, 7Fx, ECx, EFx, ESx • 0659-CTO, 98x, 9Ax, H6x, HEx, HGx, JPx, JQx • 9455-CTO, 23x, 38x, 39x, 4Hx, 7Tx, A2x, B2x, B3x, BJx, BLx, DPx, LVx, LWx • 9456-CTO, 63x, 66x, 6Px, E6x, E7x, ECx, EDx, EEx, EYx, F6x, L4x, LYx, LZx • 9457-CTO, DUx, DWx, H3x, HQx, HRx, J6x, J7x, JHx, JMx, JNx, LSx • 9458-CTO, L8x • 9459-CTO, ASx, CVx, LTx • 9444-CTO • 9445-CTO • 9460-CTO, 2Mx, 2Rx, 34x, 3Lx, 3Px, 3Vx, 8Fx, A6x, AYx, B2x, B5x, B6x, BGx • 9461-CTO, 56x, C8x, C9x, CAx, D5x, D6x, D7x, DDx, DEx, DFx, DUx, DXx, H4x, H5x, HHx, HRx, HWx, HYx • 9462-CTO, 6Ex, 6Sx, 73x, 7Fx, 7Yx, 8Hx, 9Rx, 9Vx, EHx, EKx, F2x, FBx, FGx, G9x, H7x, KTx, KUx • 9463-CTO, HPx, HQx, HUx, HVx, LRx • 9464-CTO, 73x, B2x, B6x, BGx, G9x • 9446-CTO • 9447-CTO (continued)	40Y8403	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
15	1-GB DDR2-667 SDRAM SO-DIMM (PC2-5300) card • 8942-CTO, 35x, 36x, 37x, 38x, 3Bx, 3Cx, 3Dx, 3Ex, 48x, 49x, ABx, ACx, ADx, AEx, AFx, ATx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx • 8943-CTO, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 54x, 55x, 56x, 57x, 58x, 59x, AGx, ALx, AMx, ANx, APx, AQx, ARx, ASx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx • 8944-CTO, 69x, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 7Ax, AJx, CBx, CCx, CDx, CEx, CFx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx • 8945-CTO, 7Wx, 7Xx, 7Yx, 7Zx, 82x, 83x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, AKx, CRx, CSx, CUx, CVx • 8947-CTO, 8Vx, 8Wx, 8Xx, 8Yx, 9Bx, 9Cx, 9Dx, 9Ex, 9Px, CWx, CXx, CYx, CZx, D2x, D3x, D4x, D5x, D6x, D7x, D8x, D9x, DAx, DBx, DCx, DDx, DEx, DFx, DGx, DHx • 8948-CTO • 8949-CTO	40Y8403	R	**
	2-GB DDR2-667 SDRAM SO-DIMM (PC2-5300) card • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	40Y8404	R	**
16	System board assembly, Int 940GML with wireless LAN (15.0-in.) • 0656-CTO, 29x, A4x • 0657-CTO, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 4Dx, 4Ex, 4Fx, 4Hx, 4Jx, 4Kx, 4Lx, 4Rx, 4Sx, AAx, AHx, AMx, BRx, BSx, CBx, CCx, CEx, CFx, HSx, HTx • 0658-CTO, 5Qx, 5Rx, 5Sx, 5Tx, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 8Bx, 8Cx, 8Kx, 8Lx, 8Mx, DEx, DFx, DQx, DRx, DSx, E4x, EGx, EVx, EWx, EXx, EYx, EZx, F2x, F3x, F4x, FEx, FFx, FHx, FJx, FMx, FQx, FVx, HLx, HMx, L5x, L6x • 0659-CTO, H5x	42W2591	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
16	System board assembly, Int 940GML with wireless LAN (15.0-in.) OA2 • 0656-CTO • 0657-CTO, JWx, K2x, KXx, KYx, KUx, LDx, LGx • 0658-CTO, JGx, KBx, L2x, L4x, L9x, LAx • 0659-CTO, JPx	42W7733	R	N
	System board assembly, Int 940GML without wireless LAN (15.0-in.) • 0656-CTO, 22x, 23x, 24x, 25x, 26x, 2Cx, 2Dx, A3x • 0657-CTO, 4Gx, 8Rx, 8Sx, 8Tx, 8Ux, BTx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CDx, LFx • 0658-CTO, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Ux, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Nx, 8Px, 8Qx, DGx, DHx, DJx, DKx, DLx, DMx, DNx, DPx, E8x, EJx, ETx, EUx, F5x, F6x, F7x, F8x, F9x, FAx, FBx, FCx, FDx, FGx, FPx, G3x, HNx, HPx, KZx, L3x, L7x, L8x • 0659-CTO	42W2590	R	N
	System board assembly, Int 940GML without wireless LAN (15.0-in.) OA2 • 0656-CTO • 0657-CTO, K3x, K4x, KVx, KWx • 0658-CTO, K6x, K7x, LBx, LCx • 0659-CTO	42W7732	R	N
	System board assembly, Int 945GM (14.1-in.) • 9455-CTO, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Sx, 7Xx, 7Yx, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ABx, M9x, MAx, MBx • 9456-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Kx, 5Jx, 5Lx, 5Mx, 5Nx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx,, 5Wx, D9x, MNx • 9457-CTO, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Px, 92x, 93x, G3x, H4x, H6x, HSx • 9458-CTO • 9459-CTO, 7Px, 92x, 93x, 99x, 9Ax, 9Bx, ATx, AUx, AZx, G3x • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W2575	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
16	System board assembly, Int 945GM (14.1-in.) OA2 • 9455-CTO • 9456-CTO • 9457-CTO, KGx • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W7717	R	N
	System board assembly, Int 945GM with IEEE1394 (14.1-in.) • 9455-CTO, 22x, 23x, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 7Tx, 7Ux, A2x, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, MCx, MDx, MEx • 9456-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 5Px, 5Qx, D4x, D5x, D6x, DFx, DGx, DHx, DJx, DKx, DLx, DMx, MPx, MQx • 9457-CTO, 72x, 73x, 74x, 75x, 76x, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Vx, 7Wx, G2x, G8x, H2x, H3x, H7x, H8x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, HHx, HJx, HKx, HMx, HNx, HPx, HQx, HRx • 9458-CTO, 7Mx, LLx, LMx • 9459-CTO, 74x, 7Gx, 7Sx, 7Rx, ASx, AVx, AWx, AXx, G2x, G9x • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W2576	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
16	System board assembly, Int 945GM with IEEE1394 (14.1-in.) OA2 • 9455-CTO, K2x • 9456-CTO, K9x, M2x, M4x, M5x, LAx • 9457-CTO, KHx, KJx, KQx • 9458-CTO, L7x • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W7718	R	N
	System board assembly, Int 945GM (15.0-in.) • 9455-CTO, 32x, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 4Ex, 4Lx, 4Mx, 4Nx, ACx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, MFx, MGx, MHx • 9456-CTO, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Rx, 6Sx, 6Tx, 6Ux, 6Xx, 6Yx, F3x, F4x, F5x, F6x, FAx, L4x, MRx • 9457-CTO, 82x, 83x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 94x, 95x, 96x, DTx, J9x, JAx, JBx, JDx, JPx • 9458-CTO, LNx • 9459-CTO, 94x, 95x, 96x, CXx, CYx, DNx • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W2577	R	N
	System board assembly, Int 945GM (15.0-in.) OA2 • 9455-CTO, LUx, LVx, LWx • 9456-CTO, L4x, LXx, LYx, LZx • 9457-CTO, KNx, KPx • 9458-CTO, L8x, • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W7719	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
16	System board assembly, Int 945GM with IEEE1394 (15.0-in.) • 9455-CTO, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Qx, 4Rx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BQx, BRx, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, DPx, LHx, MJx, MKx, MLx, MMx • 9456-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Vx, 6Wx, 6Zx, DRx, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, MSx, MTx, MUx, MVx • 9457-CTO, 84x, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Wx, 97x, 98x, DSx, G4x, G5x, G6x, G7x, J3x, J6x, J7x JFx, JGx, JHx, JJx, JKx, JLx, JMx, JNx • 9458-CTO, 8Qx, 8Rx • 9459-CTO, 8Jx, 8Kx, 8Vx, 8Wx, 97x, 98x, CUx, CVx, G4x, FXx, FYx, FZx, G5x, G6x • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W2578	R	N
	System board assembly, Int 945GM with IEEE1394 (15.0-in.) OA2 • 9455-CTO, K3x, LCx, LDx, LEx, LFx • 9456-CTO, K8x, KAx, KLx, L2x, L3x, L5x, L6x, L9x, LBx, LGx, LJx, LKx • 9457-CTO, KDx, KEx, KFx, KRx, LSx • 9458-CTO • 9459-CTO, KKx, LTx • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W7720	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
16	System board assembly, Int 945GM with IEEE1394 and wireless WAN (15.0-in.) • 9455-CTO, 4Px, BUx • 9456-CTO, 6Nx, 6Px, 6Qx, DQx, EYx, EZx • 9457-CTO, 8Px, DVx • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W2579	R	N
	System board assembly, Int 945GM with IEEE1394 and wireless WAN (15.0-in.) OA2 • 9455-CTO • 9456-CTO, KMx • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W7721	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
16	System board assembly, Int 945GM with wireless LAN (15.0- in.) • 0656-CTO • 0657-CTO, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Cx, 4Mx, 4Nx, 4Px, 4Qx, 4Tx, 9Ex, 9Fx, 9Gx, 9Hx, A8x, A9x, ACx, ADx, AEx, AFx, AGx, AJx, AKx, ALx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, HKx, HQx, HRx, HUx, HVx, KCx, KDx, KEx, KFx • 0658-CTO, 52x, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Wx, 7Xx, 7Yx, 7Zx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 9Jx, 9Kx, 9Lx, 9Mx, 9Nx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, CTx, CUx, CVx, CWx, CXx, CYx, CZx, D2x, D3x, D4x, D5x, D6x, D7x, D8x, D9x, DAx, DBx, DCx, DDx, DTx, DUx, DVx, DWx, DXx, DYx, DZx, E2x, E3x, E5x, E6x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EFx, EHx, EKx, ELx, EMx, ENx, EQx, ERx, ESx, FKx, FLx, FNx, FRx, FSx, FTx, FUx, FWx, FXx, FYx, FZx, H2x, H3x, H4x, G4x, KGx, KSx • 0659-CTO, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, H6x, H7x, H8x, H9x, HAx, HBx, HCx, HDx, HEx, HFx, HGx	42W2592	R	N
	System board assembly, Int 945GM with wireless LAN (15.0- in.) OA2 • 0656-CTO • 0657-CTO, J4x, J5x, J6x, JMx, JNx, JSx, JTx, JUx, JVx, JXx, JYx, JZx, K5x, KJx, KKx, KLx, KMx, KNx, LHx, LJx, LKx, LLx, LMx, LNx, LPx, KRx, KTx, LEx • 0658-CTO, J7x, J8x, JEx, JFx, JHx, JJx, JKx, K8x, K9x, KAx, KPx, KQx • 0659-CTO, JQx, JRx	42W7734	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
16	System board assembly, Intel 965GM with IEEE1394 and S-Video (15.0-in) • 8942-all • 8943-all • 8944-all • 8945-all • 8947-all • 8948-all • 8949-all	42W7822	R	N
	System board assembly, ATI M52-64 with IEEE1394 (14.1-in.) • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx • 9461-CTO, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Ux, 4Vx, 4Wx, C8x, C9x, CAx • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Cx, 6Dx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Ux, 6Vx, 6Wx, 6Xx, 6Zx, 92x, 93x, 94x, E2x, E4x, E5x, E6x, EAx, EBx, ECx, EDx, EEx • 9463-CTO, 82x, LPx • 9464-CTO, 63x, 69x, 6Wx, 84x, 86x, 88x, 92x, 93x, 94x, CDx, CEx, CFx, CGx, CHx, CJx • 9446-CTO • 9447-CTO	42W2580	R	N
	System board assembly, ATI M52-64 with IEEE1394 (14.1-in.) OA2 • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, HDx. HFx, HSx • 9461-CTO, HLx, HNx, M6x, M7x, M8x • 9462-CTO, H8x, KVx, HTx • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W7722	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
16	System board assembly, ATI M52-64 with IEEE1394 and wireless WAN (14.1-in.) • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 2Kx, 8Jx, AYx • 9461-CTO, 4Sx, 4Tx, CKx • 9462-CTO, 6Qx, 6Rx, 6Sx, 6Tx, 8Hx, EHx, EJx, EKx, ELx • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W2584	R	N
	System board assembly, ATI M52-64 with IEEE1394 and wireless WAN (14.1-in.) OA2 • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W7726	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
16	System board assembly, ATI M52-64 with IEEE1394 (15.0-in.) • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 35x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Hx, 3Jx, 3Tx, 3Ux, 3Vx, 3Wx, BDx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx • 9461-CTO, 58x, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DYx • 9462-CTO, 78x, 79x, 7Dx, 7Cx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Lx, 7Kx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 95x, 96x, 97x, 98x, • 9463-CTO, 7Rx, FAx, FCx, FDx, FEx, FFx • 9464-CTO, 7Vx, 7Xx, 95x, 96x, 97x, BZx, DLx, DMx, DNx, DPx, DSx, DVx, DWx • 9446-CTO • 9447-CTO	42W2582	R	N
	System board assembly, ATI M52-64 with IEEE1394 (15.0-in.) OA2 • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, H3x, HCx, HEx • 9461-CTO, HMx • 9462-CTO • 9463-CTO, HUx • 9464-CTO • 9446-CTO • 9447-CTO	42W7724	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
16	System board assembly, ATI M52-64 with IEEE1394 (15.0-in.) OA2 • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, H3x, HCx, HEx • 9461-CTO, HMx • 9462-CTO • 9463-CTO, HUx • 9464-CTO • 9446-CTO • 9447-CTO	42W7724	R	N
	System board assembly, ATI M54-128 with IEEE1394 (14.1-in.) • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 27x, 28x, 29x, 2Ux, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx • 9461-CTO, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Xx,,C2x, C3x, C4x, C5x, C6x, C7x • 9462-CTO, 6Ax, 6Bx, 6Yx, C2x, C3x, C4x, C5x, C6x, C7x, G8x, G9x, E7x, E9x • 9463-CTO • 9464-CTO, G9x • 9446-CTO • 9447-CTO	42W2581	R	N
	System board assembly, ATI M54-128 with IEEE1394 (14.1-in.) OA2 • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO, H9x, HAx, KTx • 9463-CTO, HPx, LQx, LRx • 9464-CTO • 9446-CTO • 9447-CTO	42W7723	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
16	System board assembly, ATI M54-128 with IEEE1394 (15.0-in.) • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 32x, 33x, 34x, 36x, 3Gx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Xx, 9Px, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx • 9461-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 59x, 5Ax, 5Nx, D2x, D3x, D4x, D5x, D6x, D7x, D9x, DAx, DBx, DUx, DXz, DZx • 9462-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 7Ax, 7Bx, 7Yx, 7Zx, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, F2x, GAx, F3x, F4x, F7x, F8x, FBx, FGx • 9463-CTO • 9464-CTO, 3Kx, 73x, 7Bx, 7Tx, BYx, GAx • 9446-CTO • 9447-CTO	42W2583	R	N
	System board assembly, ATI M54-128 with IEEE1394 (15.0-in.) OA2 • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, HBx • 9461-CTO, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HRx, HWx, HXx, HYx • 9462-CTO, H7x, KUx • 9463-CTO, HQx, HVx • 9464-CTO • 9446-CTO • 9447-CTO	42W7725	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
17	PC Card/ExpressCard slot • 9455-all • 9456-all • 9457-all • 9458-all • 9459-all • 9444-CTO • 9445-CTO • 9460-all • 9461-all • 9462-all • 9463-all • 9464-all • 9446-CTO • 9447-CTO • 8942-all • 8943-all • 8944-all • 8945-all • 8947-all • 8948-all • 8949-all	26R9585	R	N
	PC Card slot • 0656-all • 0657-all • 0658-all • 0659-all	41W5206	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Core Duo processor T2300 (1.60 GHz) • 0656-CTO • 0657-CTO, 3Hx • 0658-CTO • 0659-CTO, 92x • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO, 4Bx • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41W1132	R	N
	CPU assembly, Intel Core Duo processor T2300E (1.60 GHz) • 0656-CTO • 0657-CTO, 3Ex, 3Fx, 3Gx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Qx, 3Vx, 4Mx, 4Tx, 9Ex, 9Fx, 9Gx, 9Hx, ARx, ASx, KFx, KGx, KJx, KKx, KLx, KMx, KNx, LEx • 0658-CTO, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 9Jx, 9Kx, 9Lx, 9Mx, 9Nx, KPx, KQx • 0659-CTO, 93x, 94x, 95x, 9Dx • 9455-CTO, 22x, 2Dx, 2Kx, 2Lx, 2Mx, 2Qx, 2Vx, 2Wx, 33x, 34x, 35x, 3Kx, 4Bx, 4Dx, 4Fx, 4Kx, 4Nx, 4Qx • 9456-CTO, 54x, 55x, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 62x, 6Ax, 6Bx, 6Ex, 6Fx, 6Jx, 6Nx, 6Zx, FJx, L9x, LAx, LBx, M2x • 9457-CTO, 72x, 7Jx, 7Kx, 84x, 8Wx, 92x, 95x, 97x, 98x • 9458-CTO • 9459-CTO, 7Sx, 8Vx, 8Wx, 92x, 95x, 97x, 98x • 9444-CTO • 9445-CTO • 9460-CTO, 26x, 27x, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Yx, 2Zx, 35x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Tx, 89x, HSx • 9461-CTO, 42x, 45x, 46x, 47x, 4Kx, 4Lx, 4Mx, 4Nx, 4Sx, 4Vx, 4Wx, 4Xx, 52x, 59x, 5Dx, 5Ex, 5Fx, 5Gx • 9462-CTO, 64x, 68x, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Qx, 6Vx, 74x, 78x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Xx, 92x, 93x, 94x, 97x, 9Yx, HTx • 9463-CTO, HUx. HVx • 9464-CTO, 7Tx, 7Vx, 7Xx, 84x, 86x, 88x, 92x, 93x, 94x, 97x • 9446-CTO • 9447-CTO	41W1329	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Core Duo processor T2400 (1.83 GHz) • 0656-CTO • 0657-CTO, 3Rx, 3Sx, 3Tx, 3Ux, 3Wx, 3Xx, 3Zx, 4Qx • 0658-CTO, 52x, 6Zx, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, CKx, EHx • 0659-CTO, 96x, 97x, 98x, 99x • 9455-CTO, 23x, 2Jx, 2Nx, 2Rx, 2Xx, 2Yx, 2Zx, 38x, 3Ax, 49x, 4Ax, 4Gx, 4Px • 9456-CTO, 56x, 57x, 5Mx, 5Nx, 5Px, 63x, 64x, 65x, 6Cx, 6Gx, 6Kx, 6Lx, 6Px, 6Qx, 6Wx • 9457-CTO, 73x, 74x, 75x, 76x, 7Fx, 7Hx, 7Lx, 7Vx, 82x, 83x, 8Ex, 8Gx, 8Jx, 8Kx, 8Lx, 8Nx, 8Px, 93x, 96x, G5x, HBx, HDx, HEx, KDx • 9458-CTO, 7Mx, 8Qx, 8Rx • 9459-CTO, 74x, 7Rx, 8Jx, 8Kx, 93x, 96x, G5x • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 28x, 2Lx, 2Mx, 2Nx, 2Px, 2Ux, 32x, 33x, 3Gx, 3Jx, 3Lx, 3Mx, 3Sx, 3Ux, 3Xx, 8Ax, 8Bx, 8Cx, 8Dx, 8Jx, 9Px • 9461-CTO, 43x, 48x, 4Ax, 4Cx, 4Dx, 4Px, 4Tx, 4Ux, 53x, 54x, 58x, 5Ax, 5Hx, 5Kx, 5Lx, 5Mx, D5x, D6x • 9462-CTO, 62x, 65x, 66x, 67x, 69x, 6Ax, 6Bx, 6Rx, 6Sx, 6Tx, 6Ux, 6Wx, 6Yx, 6Zx, 72x, 75x, 76x, 79x, 7Ax, 7Bx, 7Zx, 8Hx, 95x, 96x, 98x, 9Qx, 9Rx, 9Sx, 9Tx, 9Zx • 9463-CTO, 7Rx, 82x • 9464-CTO, 3Kx, 69x, 6Wx, 7Bx, 95x, 96x, CFx • 9446-CTO • 9447-CTO	41W1134	R	N
	CPU assembly, Intel Core Duo processor T2450 (2.0 GHz) • 0656-CTO • 0657-CTO, LMx • 0658-CTO • 0659-CTO • 9455-CTO • 9456-CTO, M5x • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO, M6x • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41R7754	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Core Duo processor T2500 (2.0 GHz) • 0656-CTO • 0657-CTO, 42x, 43x, 44x • 0658-CTO, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, CLx • 0659-CTO, 9Ax, 9Bx • 9455-CTO, 39x, 4Hx, 4Jx, 7Tx, 7Ux • 9456-CTO, 58x, 5Qx, 66x, 67x, 6Mx • 9457-CTO, 7Wx, 8Mx • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 29x, 2Qx, 2Rx, 2Sx, 2Tx, 34x, 36x, 3Nx, 3Px, 3Qx, 3Rx, 3Vx, 3Wx, 8Ex, 8Fx, 8Gx • 9461-CTO, 44x, 49x, 4Ex, 4Fx, 4Qx, 4Rx, 55x, 56x, 57x, 5Jx, 5Nx • 9462-CTO, 63x, 6Nx, 6Px, 6Xx, 73x, 77x, 7Px, 7Qx, 7Yx, 9Ux, 9Vx, 9Wx, 9Xx • 9463-CTO • 9464-CTO, 63x, 73x • 9446-CTO • 9447-CTO	41W1136	R	N
	CPU assembly, Intel Core Duo processor T2600 (2.13 GHz) • 0656-CTO • 0657-CTO • 0658-CTO, ENx • 0659-CTO • 9455-CTO, A2x, AKx • 9456-CTO • 9457-CTO, H3x • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, A6x, AFx • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41W1138	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Core 2 Duo processor T5250 (1.5 GHz) • 8942-CTO • 8943-CTO, 9Tx, APx, AQx • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	42W7838	R	N
	CPU assembly, Intel Core 2 Duo processor T5270 (1.4 GHz) • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	42W7856	R	N
	CPU assembly, Intel Core 2 Duo processor T5300 (1.73 GHz) • 0656-CTO • 0657-CTO, LPx • 0658-CTO • 0659-CTO • 9455-CTO, • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO, M8x • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41R7755	R	N
	CPU assembly, Intel Core 2 Duo processor T5450 (1.66 GHz) • 8942-CTO • 8943-CTO, 9Sx, ARx, ASx • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	42W7839	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Core 2 Duo processor T5470 (1.6 GHz) • 8942-CTO • 8943-CTO, 9Rx • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	42W7840	R	N
	CPU assembly, Intel Core 2 Duo processor T5500 (1.66 GHz) • 0656-CTO • 0657-CTO, A8x, A9x, ACx, ADx, AEx, AFx, AJx, ANx, B2x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, J5x, JTx, JUx, JNx, JVx, JZx, KEx • 0658-CTO, CMx, CWx, CXx, CYx, CZx, D2x, D3x, D4x, D5x, D6x, D7x, D8x, D9x, DAx, DBx, DCx, DDx, DTx, DUx, E5x, E9x, EDx, FLx, FRx, FXx, FYx, FZx, H2x, H3x, H4x, HKx, HQx, HRx, HVx, J7x, JHx, KAx • 0659-CTO, H6x, H7x, H8x, HBx, JQx, JRx • 9455-CTO, A7x, AFx, AQx, ARx, BCx, BDx, BEx, BFx, BGx, BHx, BNx, BZx, C4x, CBx, CCx, CSx, LCx, LDx, LFx • 9456-CTO, D4x, DFx, DQx, DRx, E5x, EAx, EPx, EQx, ERx, ESx, ETx, EUx, EZx, F3x, F4x, FBx, FCx, FFx, FKx, FMx, HTx, K8x, K9x, KAx, KLx, KMx, L2x, L3x, L6x, LHx, LKx • 9457-CTO, DSx, DTx, HJx, HKx, HMx, HNx, HPx, HQx, J9x, JJx, JKx, JLx, JMx, KHx, KNx, KPx, KQx, KRx • 9458-CTO, L7x, LLx, LMx, LNx • 9459-CTO, ATx, CUx, CXx • 9444-CTO • 9445-CTO • 9460-CTO, AVx, AWx, BDx, BUx, BWx, HEx, HFx • 9461-CTO, C2x, C5x, C8x, D2x, D9x, DDx, DJx, CKx, H5x, HMx, HNx • 9462-CTO, H8x • 9463-CTO • 9464-CTO, CEx, BZx • 9446-CTO • 9447-CTO	41W1409	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Core 2 Duo processor T5550 (1.83 GHz) • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	43N7302	R	N
	CPU assembly, Intel Core 2 Duo processor T5600 (1.83 GHz) • 0656-CTO • 0657-CTO, ALx, AQx, ATx, AUx, AVx, AWx, AXx, AYx, B3x, B4x, B5x, B6x, B7x, B8x, B9x, J6x, JYx, K5x, KTx • 0658-CTO, CNx, CPx, CQx, CRx, CSx, CTx, CUx, CVx, DVx, DWx, DXx, E6x, EAx, EEx, EQx, FKx, FNx, FSx, FUx, FWx, J8x, JFx, K9x • 0659-CTO, H9x, HCx, HEx, HFx • 9455-CTO, A9x, AEx, AHx, ALx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BMx, BRx, BUx, C5x, CDx, CQx, CRx, DPx, K2x, K3x, LEx • 9456-CTO, D5x, DGx, DJx, E6x, EBx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EVx, F5x, F6x, FGx, FLx, FNx, L4x, L5x • 9457-CTO, DVx, DWx, G6x, G7x, H2x, H4x, H6x, H7x, HAx, HCx, HFx, HHx, HRx, J3x, J6x, JAx, JDx, JFx, JGx, JNx, KEx • 9458-CTO, L8x • 9459-CTO, AVx, AWx, FXx, FZx, G6x, KKx • 9444-CTO • 9445-CTO • 9460-CTO, A8x, A9x, AAx, AGx, AJx, AKx, ALx, ANx, APx, ARx, ASx, ATx, AUx, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BFx, BGx, BHx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BVx, H3x, HCx, HDx • 9461-CTO, C3x, C6x, C9x, D3x, DAx, DEx, DHx, DKx, DXx, DYx, DZx, KSx, HGx, HKx, HLx, HRx, HWx, HXx, HYx • 9462-CTO, E4x, E5x, E6x, E9x, EAx, EBx, ECx, EHx, EJx, EKx, ELx, F2x, F4x, F7x, F8x, FAx, FCx, FDx, FGx, KTx, KUx, KVx • 9463-CTO, HPx, LPx, LQx, LRx • 9464-CTO, BYx, CDx, CGx, CHx, CJx, DLx, DMx, DSx • 9446-CTO • 9447-CTO	41W1410	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Core 2 Duo processor T7100 (1.8 GHz) • 8942-CTO, 33x, 34x, 39x, 3Ax, 3Gx, 3Kx, 3Lx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 9Qx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, ATx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx • 8943-CTO, 4Bx, 4Dx, 4Fx, 4Hx, 4Jx, 4Kx, 4Tx, 4Vx, 4Xx, 4Zx, 52x, 53x, 5Bx, 5Ex, 5Fx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Xx, 5Zx, 63x, 64x, A6x, A7x, A8x, A9x, BCx, BEx, BGx, BJx, BKx, BMx, BPx, BRx, BTx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx • 8944-CTO, 66x, 67x, 6Ax, 6Bx, 6Cx, 6Dx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Yx, 6Zx, 73x, 76x, 77x, 7Dx, 7Ex, 7Jx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 9Ux, 9Vx, 9Wx, CBx, CCx, CFx, CGx, CHx, CJx, CMx, CNx, CQx • 8945-CTO, 7Ux, 7Vx, 7Yx, 7Zx, 84x, 85x, 88x, 89x, 8Dx, 8Gx, 8Hx, CRx, CSx, CUx, CVx • 8947-CTO, 8Lx, 8Nx, 8Qx, 8Sx, 8Tx, 8Ux, 92x, 94x, 96x, 98x, 99x, 9Ax, 9Gx, 9Kx, 9Lx, CXx, CZx, D3x, D5x, D6x, D7x, D9x, DBx, DDx, DFx, DGx, DHx • 8948-CTO • 8949-CTO	42W7654	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Core 2 Duo processor T7200 (2.0 GHz) • 0656-CTO • 0657-CTO, AGx, AKx, APx, AZx, JXx • 0658-CTO, DYx, DZx, E2x, E3x, E7x, EBx, ECx, EFx, ERx, ESx, FTx, JEx, JJx, K8x • 0659-CTO, HAx, HDx, HGx • 9455-CTO, AAx, ABx, AGx, AMx, BJx, BLx, C6x, C7x, • 9456-CTO, D6x, DHx, DKx, E4x, E7x, ECx, EYx, FHx • 9457-CTO, DUx, G2x, G3x, G4x, G8x, H8x, HGx, HSx, J7x, JBx, JHx, JPx, KFx, KJx, LSx • 9458-CTO • 9459-CTO, ASx, AUx, AXx, AZx, CVx, CYx, DNx, FYx, G2x, G3x, G4x, G9x, LTx • 9444-CTO • 9445-CTO • 9460-CTO, A3x, A4x, A5x, A7x, ACx, AEx, AHx, AMx, AXx, AYx, AZx, B2x, B3x, B5x, BEx, BJx, HBx • 9461-CTO, C4x, C7x, CAx, D4x, D7x, DBx, DFx, DUx, H4x, HHx, HJx • 9462-CTO, E2x, E7x, EDx, EEx, F3x, FBx, FEx, FFx, G8x, G9x, GAx, H9x, HAx • 9463-CTO, HQx • 9464-CTO, G9x, GAx, DNx, DPx, DVx, DWx • 9446-CTO • 9447-CTO	41W1411	R	N
	CPU assembly, Intel Core 2 Duo processor T7250 (2.0 GHz) • 8942-CTO, ACx, ADx • 8943-CTO, AGx • 8944-CTO, AHx, AJx • 8945-CTO, AKx • 8947-CTO • 8948-CTO • 8949-CTO	42W7847	R	N
	CPU assembly, Intel Core 2 Duo processor T7300 (2.0 GHz) • 8942-CTO, 22x, 35x, 36x, 37x, 38x, 3Bx, 3Cx, 3Dx, 3Ex, 3Mx, 46x, 47x, A5x • 8943-CTO, 4Ax, 4Cx, 4Ex, 4Gx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Ux, 4Wx, 4Yx, 54x, 55x, 56x, 57x, 58x, 59x, 5Gx, 5Yx, 62x, 65x, BBx, BDx, BFx, BHx, BNx, BQx, BSx, BUx • 8944-CTO, 68x, 69x, 6Ex, 6Fx, 6Gx, 6Hx, 6Sx, 6Tx, 6Ux, 6Vx, 78x, 7Sx, 7Tx • 8945-CTO, 7Wx, 7Xx, 82x, 83x, 86x, 87x, 8Ax, 8Bx, 8Jx • 8947-CTO, 8Kx, 8Mx, 8Px, 8Rx, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 93x, 95x, 97x, 9Bx, 9Cx, 9Dx, 9Ex, 9Mx, CWx, CYx, D2x, D4x, D8x, DAx, DCx, DEx • 8948-CTO, 22x • 8949-CTO, 22x	42W7655	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Core 2 Duo processor T7400 (2.16 GHz) • 0656-CTO • 0657-CTO • 0658-CTO, JKx • 0659-CTO • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO, H7x • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41W1412	R	N
	CPU assembly, Intel Core 2 Duo processor T7500 (2.2 GHz) • 8942-CTO, 48x, 49x • 8943-CTO • 8944-CTO, 7Ax • 8945-CTO • 8947-CTO, 9Px • 8948-CTO • 8949-CTO	42W7656	R	N
	CPU assembly, Intel Core 2 Duo processor T7500 (2.2 GHz) • 8942-CTO, AEx, AFx • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	42W7849	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Core 2 Duo processor T7600 (2.33 GHz) • 0656-CTO • 0657-CTO • 0658-CTO • 0659-CTO • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41W1413	R	N
	CPU assembly, Intel Core 2 Duo processor T7700 (2.4 GHz) • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	42W7657	R	N
	CPU assembly, Intel Core 2 Duo processor T7700 (2.4 GHz) • 8942-CTO • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	42W7850	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Core Solo processor T1300 (1.6 GHz) • 0656-CTO • 0657-CTO, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Cx • 0658-CTO, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Wx, 7Xx, 7Yx, 7Zx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax • 0659-CTO, 9Cx • 9455-CTO, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Px, 2Sx, 2Tx, 2Ux, 32x, 36x, 37x, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 4Cx, 4Ex • 9456-CTO, 53x, 5Dx, 5Ex, 5Fx, 68x, 69x, 6Dx, 6Ux, 6Vx • 9457-CTO, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Px, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Hx, 94x • 9458-CTO • 9459-CTO, 7Px, 94x • 9444-CTO • 9445-CTO • 9460-CTO, 2Ax, 2Bx, 2Vx, 2Wx, 2Xx, 37x, 38x, 3Hx • 9461-CTO • 9462-CTO, 6Cx, 6Dx, 7Cx, 7Dx • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41W1140	R	N
	CPU assembly, Intel Core Solo processor T1400 (1.73 GHz) • 0656-CTO • 0657-CTO, 4Nx, 4Px, HUx • 0658-CTO, EKx, ELx, EMx, G4x • 0659-CTO • 9455-CTO, 4Rx, AJx, C8x, C9x, CEx • 9456-CTO, 5Wx, 6Xx, 6Yx, LJx • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, AQx, BSx • 9461-CTO, DGx • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41W1328	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Pentium Dual Core processor T2080 (1.73 GHz) • 0656-CTO • 0657-CTO, LHx, LJx, LNx • 0658-CTO • 0659-CTO • 9455-CTO • 9456-CTO, M4x • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41R7753	R	N
	CPU assembly, Intel Pentium Dual Core processor T2130 (1.86 GHz) • 0656-CTO • 0657-CTO, LKx, LLx • 0658-CTO • 0659-CTO • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO, M7x • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41R7853	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Pentium Dual Core processor T2310 (1.46 GHz) • 8942-CTO • 8943-CTO, ALx, AMx • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	43N7304	R	N
	CPU assembly, Intel Pentium Dual Core processor T2330 (1.6 GHz) • 8942-CTO • 8943-CTO, ANx • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	43N7303	R	N
	CPU assembly, Intel Celeron M processor 410 (1.46 GHz) • 0656-CTO, 2Cx, 2Dx • 0657-CTO, 3Px, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Ux, 8Rx, 8Sx, 8Tx, 8Ux • 0658-CTO, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx • 0659-CTO • 9455-CTO, 4Lx, 4Mx, 7Xx, 7Yx • 9456-CTO, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41W5181	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Celeron M processor 420 (1.6 GHz) • 0656-CTO, 22x, 23x, 24x, 25x, 26x, 29x • 0657-CTO, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 4Rx, 4Sx, AAx, AHx, AMx, BRx, BSx, BTx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, HSx, HTx, J4x, JSx, K3x, K4x • 0658-CTO, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, DEx, DFx, DGx, DHx, DJx, DKx, DLx, DMx, DNx, DPx, FMx, FVx, G3x, HLx, HMx, HNx, HPx, K6x, K7x • 0659-CTO, JPx • 9455-CTO, 24x, 25x, 26x, 2Ex, 2Fx, 2Gx, 2Hx, 3Bx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, A4x, ACx, BQx, BVx, BWx • 9456-CTO, 52x, 59x, 5Ax, 5Bx, 5Cx, 6Hx, 6Rx, 6Sx, 6Tx, EXx • 9457-CTO, 7Gx • 9458-CTO • 9459-CTO, 7Gx, 99x, 9Ax, 9Bx • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41W1202	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Celeron M processor 430 (1.73 GHz) • 0656-CTO, A3x, A4x • 0657-CTO, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CFx, JMx, JWx, K2x, KCx, KDx, KRx, KSx, KVx, KWx, KUx, LDx, LFx • 0658-CTO, DQx, DRx, DSx, E4x, E8x, EGx, EJx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, F2x, F3x, F4x, F5x, F6x, F7x, F8x, F9x, FAx, FBx, FCx, FDx, FEx, FFx, FGx, FHx, FJx, FPx, FQx, JGx, KBx, L5x, L6x, L7x, L8x, LBx, LCx • 0659-CTO • 9455-CTO, A5x, A6x, A8x, ADx, ANx, APx, BPx, BXx, BYx, C2x, C3x, CAx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, LUx, M9x, MAx, MBx, MCx, MDx, MEx, MFx, MGx, MHx, MJx, MKx, MLx, MMx • 9456-CTO, D9x, DLx, DMx, EWx, FAx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, LGx, LXx, MNx, MPx, MQx, MRx, MSx, MTx, MUx, MVx • 9457-CTO, KGx • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO, H5x • 9446-CTO • 9447-CTO	41W5183	R	N
	CPU assembly, Intel Celeron M processor 440 (1.86 GHz) • 0656-CTO • 0657-CTO, KXx • 0658-CTO, KZx, L2x, L9x • 0659-CTO • 9455-CTO, LVx • 9456-CTO, LYx • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41W1373	R	N

(continued)

<table>
<tr><th>No.</th><th>FRU</th><th>FRU no.</th><th>RoHS ID</th><th>CRU ID</th></tr>
<tr><td>18</td><td>CPU assembly, Intel Celeron M processor 450 (2.0 GHz)
• 0656-CTO
• 0657-CTO, KYx
• 0658-CTO, L3x, L4x, LAx
• 0659-CTO
• 9455-CTO, LWx
• 9456-CTO, LZx
• 9457-CTO
• 9458-CTO
• 9459-CTO
• 9444-CTO
• 9445-CTO
• 9460-CTO
• 9461-CTO
• 9462-CTO
• 9463-CTO
• 9464-CTO
• 9446-CTO
• 9447-CTO</td><td>42T0207</td><td>R</td><td>N</td></tr>
<tr><td></td><td>CPU assembly, Intel Celeron M processor 520 (1.6 GHz)
• 0656-CTO
• 0657-CTO
• 0658-CTO
• 0659-CTO
• 9455-CTO
• 9456-CTO
• 9457-CTO
• 9458-CTO
• 9459-CTO
• 9444-CTO
• 9445-CTO
• 9460-CTO
• 9461-CTO
• 9462-CTO
• 9463-CTO
• 9464-CTO
• 9446-CTO
• 9447-CTO</td><td>42T0209</td><td>R</td><td>N</td></tr>
</table>

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
18	CPU assembly, Intel Celeron M processor 530 (1.73 GHz) • 0656-CTO • 0657-CTO, LGx • 0658-CTO • 0659-CTO • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42T0211	R	N
	CPU assembly, Intel Celeron M processor 530 (1.73 GHz) • 8942-CTO, AAx • 8943-CTO • 8944-CTO • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	43N7301	R	N
	CPU assembly, Intel Celeron M processor 540 (1.86 GHz) • 8942-CTO, 32x, ABx • 8943-CTO, 5Vx, 5Wx • 8944-CTO, 6Jx, 6Kx, 6Wx, 6Xx, 7Bx, 7Cx, 7Gx, 7Kx, 7Lx, CDx, CEx, CKx, CLx, CPx • 8945-CTO • 8947-CTO • 8948-CTO • 8949-CTO	41R7621	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
19	Speaker assembly for R60, R61, and R61i • 9455-all • 9456-all • 9457-all • 9458-all • 9459-all • 9460-all • 9461-all • 9462-all • 9463-all • 9464-all • 8942-all • 8943-all • 8944-all • 8945-all • 8947-all • 8948-all • 8949-all	39T7473	R	N
	Speaker assembly for R60e and R61i • 0656-all • 0657-all • 0658-all • 0659-all	39T7476	R	N
20	IEEE 1394 cable for R60 and R61i • 9455-all • 9456-all • 9457-all • 9458-all • 9459-all • 9444-all • 9445-all • 9460-all • 9461-all • 9462-all • 9463-all • 9464-all • 9446-all • 9447-all	91P7011	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
20	IEEE 1394 cable for R61 and R61i • 8942-all • 8943-all • 8944-all • 8945-all • 8947-all • 8948-all • 8949-all	93P4583	R	N
21	Sierra Wireless EV-DO Wireless WAN Mini PCI Express Adapter • 9455-CTO • 9456-CTO, 6Nx, 6Px • 9457-CTO, 8Px • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 2Kx • 9461-CTO, 4Sx, 4Tx, KSx • 9462-CTO, 6Qx, 6Rx • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	41W1177	R	**
	Sierra Wireless MC8755 PCI Express MiniCard • 9455-CTO, 4Px, 4Qx, 4Rx, BUx • 9456-CTO, 6Qx, EYx, EZx, DQx, KMx • 9457-CTO, DVx • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 8Jx, AYx • 9461-CTO • 9462-CTO, 6Sx, 6Tx, 8Hx, EHx, EJx, EKx, ELx • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42T0835	R	**

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
21	Integrated Cingular HSDPA 3G Wireless Broadband Network Adapter • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42T0804	R	**
22	SDRAM SO-DIMM cover	42W2395	R	N
23	SIM card slot for R60 and R61i • 9455-all • 9456-all • 9457-all • 9458-all • 9459-all • 9444-CTO • 9445-CTO • 9460-all • 9461-all • 9462-all • 9463-all • 9464-all • 9446-CTO • 9447-CTO	41W1326	R	*

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
24	Thermal device and fan ATI • 0656-CTO • 0657-CTO • 0658-CTO • 0659-CTO • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-all • 9461-all • 9462-all • 9463-all • 9464-all • 9446-CTO • 9447-CTO			
	Toshiba	41W5269	R	N
	CCI	41W5270	R	N
	Furukawa	41W5271	R	N
	Thermal device and fan Integ • 0656-all • 0657-all • 0658-all • 0659-all • 9455-all • 9456-all • 9457-all • 9458-all • 9459-all • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO			
	Furukawa	41W5268	R	N
	CCI	41W5156	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
24	Thermal device and fan integ • 8942-all • 8943-all • 8944-all • 8945-all • 8947-all • 8948-all • 8949-all			
	Toshiba	42X4374	R	N
	CCI	42X4913	R	N
	Heat sink plate • 0656-all • 0657-all • 0658-all • 0659-all • 9455-all • 9456-all • 9457-all • 9458-all • 9459-all • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	42W2401	R	N
25	ATI chip Plate	42W3986	R	N
26	Keyboard (see “Keyboard” on page 229.)			
27	TrackPoint stick caps	91P9642	R	*
—	Thermal grease	91P8835	N	N
—	Security screw (M3 x 6)	13N5332	R	*

LCD FRUs

14.1-in. XGA TFT

No.	FRU	FRU no.	RoHS ID	CRU ID
1	LCD cover kit (14.1-in.) • 9455-CTO, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 7Tx, 7Ux, 7Xx, 7Yx, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ABx, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, K2x, M9x, MAx, MBx, MCx, MDx, MEx • 9456-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Kx, 5Jx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, D9x, DFx, DGx, DHx, DJx, DKx, DLx, DMx, K9x, LAx, M2x, M4x, M5x, MNx, MPx, MQx • 9457-CTO, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Jx, 7Hx, 7Kx, 7Lx, 7Px, 7Vx, 7Wx, 92x, 93x, G3x, H4x, H6x, H7x, H8x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, HHx, HJx, HKx, HMx, HNx, HPx, HQx, HRx, HSx, KGx, KHx, KQx • 9458-CTO, 7Mx, L7x, LLx, LMx • 9459-CTO, 7Gx, 7Px, 7Sx, 7Rx, 92x, 93x, 99x, 9Ax, 9Bx, ATx, AUx, AVx, AWx, AXx, AZx, G3x, G9x • 9444-CTO • 9445-CTO • 9460-CTO, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Jx, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AYx, HFx, HSx • 9461-CTO, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Xx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CKx, HNx, M6x, M7x, M8x • 9462-CTO, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Yx, 6Zx, 8Hx, 92x, 93x, 94x, G8x, G9x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EHx, EJx, EKx, ELx, H8x, H9x, HAx, KTx, KVx, HTx • 9463-CTO, 82x, HPx, LPx, LQx, LRx • 9464-CTO, 6Wx, 86x, 88x, 92x, 93x, 94x, G9x, CEx, CFx, CGx, CHx, CJx • 9446-CTO • 9447-CTO	13N7191	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
2	Hinge, 14.1-in. • 9455-CTO, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 7Tx, 7Ux, 7Xx, 7Yx, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ABx, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, K2x, M9x, MAx, MBx, MCx, MDx, MEx • 9456-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Kx, 5Jx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, D9x, DFx, DGx, DHx, DJx, DKx, DLx, DMx, K9x, LAx, M2x, M4x, M5x, MNx, MPx, MQx • 9457-CTO, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Jx, 7Hx, 7Kx, 7Lx, 7Px, 7Vx, 7Wx, 92x, 93x, G3x, H4x, H6x, H7x, H8x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, HHx, HJx, HKx, HMx, HNx, HPx, HQx, HRx, HSx, KGx, KHx, KQx • 9458-CTO, 7Mx, L7x, LLx, LMx • 9459-CTO, 7Gx, 7Px, 7Sx, 7Rx, 92x, 93x, 99x, 9Ax, 9Bx, ATx, AUx, AVx, AWx, AXx, AZx, G3x, G9x • 9444-CTO • 9445-CTO • 9460-CTO, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Jx, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AYx, HFx • 9461-CTO, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Xx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CKx, HNx, M6x, M7x, M8x • 9462-CTO, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Yx, 6Zx, 8Hx, 92x, 93x, 94x, G8x, G9x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EHx, EJx, EKx, ELx, H8x, H9x, HAx, KTx, KVx, HTx • 9463-CTO, 82x, HPx, LPx, LQx, LRx • 9464-CTO, 6Wx, 86x, 88x, 92x, 93x, 94x, G9x, CEx, CFx, CGx, CHx, CJx • 9446-CTO • 9447-CTO	41W5152	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
3	LCD cable assembly (14.1-in.) • 9455-CTO, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 7Tx, 7Ux, 7Xx, 7Yx, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ABx, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, K2x, M9x, MAx, MBx, MCx, MDx, MEx • 9456-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Kx, 5Jx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, D9x, DFx, DGx, DHx, DJx, DKx, DLx, DMx, K9x, LAx, M2x, M4x, M5x, MNx, MPx, MQx • 9457-CTO, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Jx, 7Hx, 7Kx, 7Lx, 7Px, 7Vx, 7Wx, 92x, 93x, G3x, H4x, H6x, H7x, H8x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, HHx, HJx, HKx, HMx, HNx, HPx, HQx, HRx, HSx, KGx, KHx, KQx • 9458-CTO, 7Mx, L7x, LLx, LMx • 9459-CTO, 7Gx, 7Px, 7Sx, 7Rx, 92x, 93x, 99x, 9Ax, 9Bx, ATx, AUx, AVx, AWx, AXx, AZx, G3x, G9x • 9444-CTO • 9445-CTO • 9460-CTO, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Jx, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AYx, HFx • 9461-CTO, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Xx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CKx, HNx, M6x, M7x, M8x • 9462-CTO, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Yx, 6Zx, 8Hx, 92x, 93x, 94x, G8x, G9x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EHx, EJx, EKx, ELx, H8x, H9x, HAx, KTx, KVx, HTx • 9463-CTO, 82x, HPx, LPx, LQx, LRx • 9464-CTO, 6Wx, 86x, 88x, 92x, 93x, 94x, G9x, CEx, CFx, CGx, CHx, CJx • 9446-CTO • 9447-CTO	93P4296	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
4	Wireless WAN antenna (14.1-in.) • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO, 2Kx, 8Jx, AYx • 9461-CTO, 4Sx, 4Tx, CKx • 9462-CTO, 6Qx, 6Rx, 6Sx, 6Tx, 8Hx, EHx, EJx, EKx, ELx • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	91P7014	R	N
5	Wireless LAN antenna (14.1-in.) • 9455-CTO, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 7Tx, 7Ux, 7Xx, 7Yx, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ABx, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, K2x, M9x, MAx, MBx, MCx, MDx, MEx • 9456-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Kx, 5Jx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, D9x, DFx, DGx, DHx, DJx, DKx, DLx, DMx, K9x, LAx, M2x, M4x, M5x, MNx, MPx, MQx • 9457-CTO, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Jx, 7Hx, 7Kx, 7Lx, 7Px, 7Vx, 7Wx, 92x, 93x, G3x, H4x, H6x, H7x, H8x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, HHx, HJx, HKx, HMx, HNx, HPx, HQx, HRx, HSx, KGx, KHx, KQx • 9458-CTO, 7Mx, L7x, LLx, LMx • 9459-CTO, 7Gx, 7Px, 7Sx, 7Rx, 92x, 93x, 99x, 9Ax, 9Bx, ATx, AUx, AVx, AWx, AXx, AZx, G3x, G9x • 9444-CTO • 9445-CTO • 9460-CTO, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Jx, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AYx, HFx, HSx (continued)	91P7012	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
5	Wireless LAN antenna (14.1-in.) • 9461-CTO, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Xx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CKx, HNx, M6x, M7x, M8x • 9462-CTO, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Yx, 6Zx, 8Hx, 92x, 93x, 94x, G8x, G9x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EHx, EJx, EKx, ELx, H8x, H9x, HAx, KTx, KVx, HTx • 9463-CTO, 82x, HPx • 9464-CTO, 6Wx, 86x, 88x, 92x, 93x, 94x, G9x, CEx, CFx, CGx, CHx, CJx • 9446-CTO • 9447-CTO	91P7012	R	N
6	Inverter card (14.1-in.) • 9455-CTO, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 7Tx, 7Ux, 7Xx, 7Yx, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ABx, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, K2x, M9x, MAx, MBx, MCx, MDx, MEx • 9456-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Kx, 5Jx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, D9x, DFx, DGx, DHx, DJx, DKx, DLx, DMx, K9x, LAx, M2x, M4x, M5x, MNx, MPx, MQx • 9457-CTO, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Jx, 7Hx, 7Kx, 7Lx, 7Px, 7Vx, 7Wx, 92x, 93x, G3x, H4x, H6x, H7x, H8x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, HHx, HJx, HKx, HMx, HNx, HPx, HQx, HRx, HSx, KGx, KHx, KQx • 9458-CTO, 7Mx, L7x, LLx, LMx • 9459-CTO, 7Gx, 7Px, 7Sx, 7Rx, 92x, 93x, 99x, 9Ax, 9Bx, ATx, AUx, AVx, AWx, AXx, AZx, G3x, G9x • 9444-CTO • 9445-CTO • 9460-CTO, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Jx, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AYx, HFx • 9461-CTO, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Xx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CKx, HNx, M6x, M7x, M8x • 9462-CTO, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Yx, 6Zx, 8Hx, 92x, 93x, 94x, G8x, G9x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EHx, EJx, EKx, ELx, H8x, H9x, HAx, KTx, KVx, HTx • 9463-CTO, 82x, HPx, LPx, LQx, LRx • 9464-CTO, 6Wx, 86x, 88x, 92x, 93x, 94x, G9x, CEx, CFx, CGx, CHx, CJx • 9446-CTO • 9447-CTO			
	YEC	41W1467	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
7	Bluetooth daughter card (BDC-2) • 9455-CTO, 25x, 29x, 2Bx, 2Jx, 2Kx, 2Mx, 2Nx, 2Rx, 2Xx, 2Yx, 7Tx, 7Ux, 7Yx, A6x, AEx, AHx, AKx, AMx, K2x, MAx • 9456-CTO, DFx, DGx, DHx, DJx, DKx, LAx, M2x, M4x, M5x • 9457-CTO, 78x, 79x, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Jx, 7Vx, 7Wx, H6x, HAx, HFx, HGx, HMx, HNx, HPx, HQx, HRx, KHx • 9458-CTO, L7x, LLx, LMx • 9459-CTO, 7Sx, AVx, AWx, AXx • 9444-CTO • 9445-CTO • 9460-CTO, 28x, 29x, 2Ax, 2Fx, 2Gx, 2Hx, 2Jx, 2Ux, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Jx, ACx, AEx, AFx, AGx, AHx, ALx, AMx, ANx ,AUx, AYx • 9461-CTO, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, M6x, M7x, M8x • 9462-CTO, 6Cx, 6Ex, 6Gx, 6Hx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Sx, 6Tx, 6Vx, 6Yx, 6Zx, 8Hx, 94x, G8x, G9x, ECx, EDx, EEx, EHx, EJx, EKx, ELx, H8x, H9x, HAx, KTx, KVx, HTx • 9463-CTO, HPx, LPx, LQx, LRx • 9464-CTO, 88x, 94x, CEx, CFx, G9x • 9446-CTO • 9447-CTO	39T0497	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
8	LCD panel, 14.1-in. XGA • 9455-CTO, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 7Tx, 7Ux, 7Xx, 7Yx, A4x, A5x, A6x, A7x, A8x, A9x, AAx, ABx, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, K2x, M9x, MAx, MBx, MCx, MDx, MEx • 9456-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Kx, 5Jx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, D9x, DFx, DGx, DHx, DJx, DKx, DLx, DMx, K9x, LAx, M2x, M4x, M5x, MNx, MPx, MQx • 9457-CTO, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Jx, 7Hx, 7Kx, 7Lx, 7Px, 7Vx, 7Wx, 92x, 93x, G3x, H4x, H6x, H7x, H8x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, HHx, HJx, HKx, HMx, HNx, HPx, HQx, HRx, HSx, KGx, KHx, KQx • 9458-CTO, 7Mx, L7x, LLx, LMx, • 9459-CTO, 7Gx, 7Px, 7Sx, 7Rx, 92x, 93x, 99x, 9Ax, 9Bx, ATx, AUx, AVx, AWx, AXx, AZx, G3x, G9x • 9444-CTO • 9445-CTO • 9460-CTO, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 2Jx, 2Kx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Jx, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AYx, HFx, HSx • 9461-CTO, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Xx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CKx, HNx, M4x, M5x • 9462-CTO, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Yx, 6Zx, 8Hx, 92x, 93x, 94x, G8x, G9x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EHx, EJx, EKx, ELx, H8x, H9x, HAx, KTx, KVx, HTx • 9463-CTO, 82x, HPx, LPx, LQx, LRx • 9464-CTO, 6Wx, 86x, 88x, 92x, 93x, 94x, G9x, CEx, CFx, CGx, CHx, CJx • 9446-CTO • 9447-CTO			
	Samsung	13N7118	R	N
	BOE-Hydis	13N7120	R	N
	TMD	13N7132	R	N
9	Clear plate kit	42W2139	R	N

14.1-in. SXGA+ TFT

No.	FRU	FRU no.	RoHS ID	CRU ID
1	LCD cover kit (14.1-in.) • 9455-CTO, 22x, 23x, A2x • 9456-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, D4x, D5x, D6x • 9457-CTO, 72x, 73x, 74x, 75x, 76x, G2x, G8x, H2x, H3x, KJx • 9458-CTO • 9459-CTO, 74x, ASx, G2x • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, HDx • 9461-CTO, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Vx, 4Wx, HLx • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Xx, E2x, E4x, E5x, E6x • 9463-CTO • 9464-CTO, 63x, 69x, 84x, CDx • 9446-CTO • 9447-CTO	13N7191	R	N
2	Hinge, 14.1-in. • 9455-CTO, 22x, 23x, A2x • 9456-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, D4x, D5x, D6x • 9457-CTO, 72x, 73x, 74x, 75x, 76x, G2x, G8x, H2x, H3x, KJx • 9458-CTO • 9459-CTO, 74x, ASx, G2x • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, HDx • 9461-CTO, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Vx, 4Wx, HLx • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Xx, E2x, E4x, E5x, E6x • 9463-CTO • 9464-CTO, 63x, 69x, 84x, CDx • 9446-CTO • 9447-CTO	41W5152	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
3	LCD cable assembly (14.1-in.) • 9455-CTO, 22x, 23x, A2x • 9456-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, D4x, D5x, D6x • 9457-CTO, 72x, 73x, 74x, 75x, 76x, G2x, G8x, H2x, H3x, KJx • 9458-CTO • 9459-CTO, 74x, ASx, G2x • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, HDx • 9461-CTO, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Vx, 4Wx, HLx • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Xx, E2x, E4x, E5x, E6x • 9463-CTO • 9464-CTO, 63x, 69x, 84x, CDx • 9446-CTO • 9447-CTO	93P4296	R	N
4	Wireless WAN antenna (14.1-in.) • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	91P7014	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
5	Wireless LAN antenna (14.1-in.) • 9455-CTO, 22x, 23x, A2x • 9456-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, D4x, D5x, D6x • 9457-CTO, 72x, 73x, 74x, 75x, 76x, G2x, G8x, H2x, H3x, KJx • 9458-CTO • 9459-CTO, 74x, ASx, G2x • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, HDx • 9461-CTO, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Vx, 4Wx, HLx • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Xx, E2x, E4x, E5x, E6x • 9463-CTO • 9464-CTO, 63x, 69x, 84x, CDx • 9446-CTO • 9447-CTO	91P7012	R	N
6	Inverter card (14.1-in.) • 9455-CTO, 22x, 23x, A2x • 9456-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, D4x, D5x, D6x • 9457-CTO, 72x, 73x, 74x, 75x, 76x, G2x, G8x, H2x, H3x, KJx • 9458-CTO • 9459-CTO, 74x, ASx, G2x • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, HDx • 9461-CTO, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Vx, 4Wx, HLx • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Xx, E2x, E4x, E5x, E6x • 9463-CTO • 9464-CTO, 63x, 69x, 84x, CDx • 9446-CTO • 9447-CTO			
	YEC	41W1467	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
7	Bluetooth daughter card (BDC-2) • 9455-CTO, 23x, A2x • 9456-CTO, D4x, D5x, D6x • 9457-CTO, G2x, H2x, H3x, KJx • 9458-CTO • 9459-CTO, ASx, G2x • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 26x, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, A3x,A4x, A5x, A6x, A7x, A8x, A9x, AAx • 9461-CTO • 9462-CTO, 66x, 67x, 6Xx, E5x • 9463-CTO • 9464-CTO, 84x, CDx • 9446-CTO • 9447-CTO	39T0497	R	N
8	LCD panel, 14.1-in. SXGA+ • 9455-CTO, 22x, 23x, A2x • 9456-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, D4x, D5x, D6x • 9457-CTO, 72x, 73x, 74x, 75x, 76x, G2x, G8x, H2x, H3x, KJx • 9458-CTO • 9459-CTO, 74x, ASx, G2x • 9444-CTO • 9445-CTO • 9460-CTO, 22x, 23x, 24x, 25x, 26x, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AAx, HDx • 9461-CTO, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Vx, 4Wx, HLx • 9462-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Xx, E2x, E4x, E5x, E6x • 9463-CTO • 9464-CTO, 63x, 69x, 84x, CDx • 9446-CTO • 9447-CTO			
	Samsung	13N7059	R	N
	BOE-Hydis	13N7061	R	N
	TMD	13N7063	R	N
9	Clear plate kit	42W2139	R	N

15.0-in. XGA TFT

No.	FRU	FRU no.	RoHS ID	CRU ID
1	LCD cover kit with IBM Logo (15.0-in.) • 0656-all • 0657-all • 0658-all • 0659-all • 9455-CTO, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Lx, 4Mx, 4Nx, ACx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, K3x, LEx, LFx, LUx, LVx, LWx, MFx, MGx, MHx, MJx, MKx, MLx, MMx • 9456-CTO, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, DRx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, KAx, KLx, L4x, L5x, L6x, L9x, LGx, LHx, LJx, LKx, LXx, LYx, LZx, MRx, MSx, MTx, MUx, MVx • 9457-CTO, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Wx, 94x, 95x, 96x, 97x, 98x, DSx, DTx, DWx, G5x, G6x, G7x, J9x, JAx, JBx, JDx, JFx, JGx, JPx, JHx, JJx, JKx, JLx, JMx, JNx, KDx, KEx, KFx, KNx, KPx, KRx, LSx • 9458-CTO, 8Rx, 8Qx, L8x, LNx • 9459-CTO, 8Jx, 8Kx, 8Vx, 8Wx, 94x, 95x, 96x, 97x, 98x, CXx, CYx, DNx, FXx, FYx, FZx, G5x, G6x, KKx, LTx • 9444-CTO • 9445-CTO • 9460-CTO, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Hx, 3Jx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 9Px, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HEx • 9461-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DYx, HMx, HXx • 9462-CTO, 7Ax, 7Bx, 7Zx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 95x, 96x, 97x, 98x, 9Yx, 9Zx, FBx, FCx, FDx, FEx, FFx, KUx • 9463-CTO, 7Rx, HUx, HVx • 9464-CTO, 3Kx, 7Bx, 7Vx, 7Xx, 95x, 96x, 97x, BZx, DLx, DMx, DNx, DPx, DSx, DVx, DWx • 9446-CTO • 9447-CTO • 8943-CTO, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Nx, 4Px, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 56x, 57x, 5Bx, 5Zx, 63x, AGx, ALx, AMx, ANx, APx, AQx, ARx, ASx, BFx, BGx, BHx, BJx, BKx, BMx, BSx, BTx, BUx, BVx, BWx, BXx • 8945-CTO, 7Ux, 7Vx, 7Yx, 7Zx, 84x, 85x, 88x, 89x, 8Dx, AKx, CRx, CSx, CUx, CVx	13N7192	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
1	LCD cover kit with IBM Logo (15.0-in.) • 8942-CTO, 22x, 3Gx, 46x, 9Qx, AAx, ABx, ACx, ADx, AEx • 8944-CTO, 73x, 7Bx, 7Cx, 7Dx, 7Ex, 7Gx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 9Wx, AJx, CPx, CQx • 8947-CTO, 9Gx • 8948-CTO • 8949-CTO			
	xxB, xxC, xxH, xxV	13N7192	R	N
	LCD cover kit with ThinkPad Logo (15.0-in.) • 8942-CTO, 22x, 32x, 33x, 34x, 37x, 38x, 39x, 3Ax, 3Dx, 3Ex, A5x, ATx, AUx, AVx, AWx • 8944-CTO, 66x, 67x, 68x, 6Ax, 6Bx, 6Cx, 6Dx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 7Bx, 7Dx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 9Ux, 9Vx, AHx, CBx, CCx, CDx, CEx, CFx, CGx, CHx, CJx, CKx, CLx, CMx, CNx • 8947-CTO, 8Mx, 8Nx, 8Rx, 8Sx, 8Tx, 8Ux, 8Xx, 8Yx, 93x, 94x, 97x, 98x, 99x, 9Ax, 9Dx 9Ex, CYx, CZx, D4x, D5x, D6x, D7x, DAx, DBx, DEx, DFx, DGx, DHx • 8948-CTO • 8949-CTO			
	xxA, xxE, xxF, xxG, xxJ, xxK, xxL, xxM, xxP xxQ, xxS, xxT, xxU, xxY	42W3147	R	N
2	Hinge, 15.0-in. • 0656-all • 0657-all • 0658-all • 0659-all • 9455-CTO, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Lx, 4Mx, 4Nx, ACx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, K3x, LEx, LFx, LUx, LVx, LWx, MFx, MGx, MHx, MJx, MKx, MLx, MMx • 9456-CTO, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, DRx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, KAx, KLx, L4x, L5x, L6x, L9x, LGx, LHx, LJx, LKx, LXx, LYx, LZx, MRx, MSx, MTx, MUx, MVx • 9457-CTO, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Wx, 94x, 95x, 96x, 97x, 98x, DSx, DTx, DWx, G5x, G6x, G7x, J9x, JAx, JBx, JDx, JFx, JGx, JPx, JHx, JJx, JKx, JLx, JMx, JNx, KDx, KEx, KFx, KNx, KPx, KRx, LSx • 9458-CTO, 8Rx, 8Qx, L8x, LNx • 9459-CTO, 8Jx, 8Kx, 8Vx, 8Wx, 94x, 95x, 96x, 97x, 98x, CXx, CYx, DNx, FXx, FYx, FZx, G5x, G6x, KKx, LTx (continued)	42W2695	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
2	Hinge, 15.0-in. • 9444-CTO • 9445-CTO • 9460-CTO, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Hx, 3Jx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 9Px, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HEx • 9461-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DYx, HMx, HXx • 9462-CTO, 7Ax, 7Bx, 7Zx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 95x, 96x, 97x, 98x, 9Yx, 9Zx, FBx, FCx, FDx, FEx, FFx, KUx • 9463-CTO, 7Rx, HUx, HVx • 9464-CTO, 3Kx, 7Bx, 7Vx, 7Xx, 95x, 96x, 97x, BZx, DLx, DMx, DNx, DPx, DSx, DVx, DWx • 9446-CTO • 9447-CTO • 8942-CTO, 22x, 32x, 33x, 34x, 37x, 38x, 39x, 3Ax, 3Dx, 3Ex, 3Gx, 46x, 9Qx, A5x, AAx, ABx, ACx, ADx, AEx, ATx, AUx, AVx, AWx • 8943-CTO, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Nx, 4Px, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 56x, 57x, 5Bx, 5Zx, 63x, AGx, ALx, AMx, ANx, APx, AQx, ARx, ASx, BFx, BGx, BHx, BJx, BKx, BMx, BSx, BTx, BUx, BVx, BWx, BXx • 8944-CTO, 66x, 67x, 68x, 6Ax, 6Bx, 6Cx, 6Dx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 73x, 7Bx, 7Dx, 7Cx, 7Ex, 7Gx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 9Ux, 9Vx, 9Wx, AHx, AJx, CBx, CCx, CDx, CEx, CFx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx • 8945-CTO, 7Ux, 7Vx, 7Yx, 7Zx, 84x, 85x, 88x, 89x, 8Dx, AKx, CRx, CSx, CUx, CVx • 8947-CTO, 8Mx, 8Nx, 8Rx, 8Sx, 8Tx, 8Ux, 8Xx, 8Yx, 93x, 94x, 97x, 98x, 99x, 9Ax, 9Dx, 9Ex, 9Gx, CYx, CZx, D4x, D5x, D6x, D7x, DAx, DBx, DEx, DFx, DGx, DHx • 8948-CTO, 22x • 8949-CTO, 22x	42W2695	R	N
3	LCD cable assembly (15.0-in.) • 0656-all • 0657-all • 0658-all • 0659-all • 9455-CTO, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Lx, 4Mx, 4Nx, ACx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, K3x, LEx, LFx, LUx, LVx, LWx, MFx, MGx, MHx, MJx, MKx, MLx, MMx	93P4297	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
3	LCD cable assembly (15.0-in.) • 9456-CTO, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, DRx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, KAx, KLx, L4x, L5x, L6x, L9x, LJx, LKx, LXx, LYx, LZx, MRx, MSx, MTx, MUx, MVx • 9457-CTO, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Wx, 94x, 95x, 96x, 97x, 98x, DSx, DTx, DWx, G5x, G6x, G7x, J9x, JAx, JBx, JDx, JFx, JGx, JPx, JHx, JJx, JKx, JLx, JMx, JNx, KDx, KEx, KFx, KNx, KPx, KRx, LSx • 9458-CTO, 8Rx, 8Qx, L8x, LNx • 9459-CTO, 8Jx, 8Kx, 8Vx, 8Wx, 94x, 95x, 96x, 97x, 98x, CXx, CYx, DNx, FXx, FYx, FZx, G5x, G6x, KKx, LTx • 9444-CTO • 9445-CTO • 9460-CTO, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Hx, 3Jx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 9Px, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HEx • 9461-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DYx, HMx, HXx • 9462-CTO, 7Ax, 7Bx, 7Zx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 95x, 96x, 97x, 98x, 9Yx, 9Zx, FBx, FCx, FDx, FEx, FFx, KUx • 9463-CTO, 7Rx, HUx, HVx • 9464-CTO, 3Kx, 7Bx, 7Vx, 7Xx, 95x, 96x, 97x, BZx, DLx, DMx, DNx, DPx, DSx, DVx, DWx • 9446-CTO • 9447-CTO • 8942-CTO, 22x, 32x, 33x, 34x, 37x, 38x, 39x, 3Ax, 3Dx, 3Ex, 3Gx, 46x, 9Qx, A5x, AAx, ABx, ACx, ADx, AEx, ATx, AUx, AVx, AWx • 8943-CTO, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Nx, 4Px, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 56x, 57x, 5Bx, 5Zx, 63x, AGx, ALx, AMx, ANx, APx, AQx, ARx, ASx, BFx, BGx, BHx, BJx, BKx, BMx, BSx, BTx, BUx, BVx, BWx, BXx • 8944-CTO, 66x, 67x, 68x, 6Ax, 6Bx, 6Cx, 6Dx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 73x, 7Bx, 7Cx, 7Dx, 7Ex, 7Gx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 9Ux, 9Vx, 9Wx, AHx, AJx, CBx, CCx, CDx, CEx, CFx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx • 8945-CTO, 7Ux, 7Vx, 7Yx, 7Zx, 84x, 85x, 88x, 89x, 8Dx, AKx, AKx, CRx, CSx, CUx, CVx • 8947-CTO, 8Mx, 8Nx, 8Rx, 8Sx, 8Tx, 8Ux, 8Xx, 8Yx, 93x, 94x, 97x, 98x, 99x, 9Ax, 9Dx, 9Ex, 9Gx, CYx, CZx, D4x, D5x, D6x, D7x, DAx, DBx, DEx, DFx, DGx, DHx • 8948-CTO, 22x • 8949-CTO, 22x	93P4297	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
4	Wireless WAN antenna (15.0-in.) • 9455-CTO • 9456-CTO • 9457-CTO • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	91P7015	R	N
5	Wireless LAN antenna (15.0-in.) • 0656- CTO, 29x, A4x • 0657-CTO, 33x, 34x, 35x, 36x, 37x, 3Ax, 3Bx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Mx, 3Px, 3Qx, 3Tx, 3Ux, 3Yx, 3Zx, 44x, 45x, 46x, 48x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Hx, 4Jx, 4Kx, 4Lx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, A8x, A9x, AAx, ACx, ADx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, CBx, CCx, CEx, CFx, HKx, HQx, HRx, HSx, HTx, HUx, HVx, J4x, J5x, J6x, JMx, JNx, JSx, JTx, JUx, JVx, JWx, JXx, JYx, JZx, K2x, K3x, K4x, K5x, KCx, KDx, KEx, KFx, KGx, KJx, KKx, KLx, KMx, KNx, KRx, KSx, KXx, KYx, KUx, KTx, LDx, LEx, LGx, LHx, LJx, LKx, LLx, LMx, LNx, LPx • 0658-CTO, 52x, 5Qx, 5Rx, 5Sx, 5Tx, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Wx, 7Xx, 7Yx, 7Zx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Kx, 8Lx, 8Mx, 9Jx, 9Kx, 9Lx, 9Mx, 9Nx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, CTx, CUx, CVx, CWx, CXx, CYx, CZx, D2x, D3x, D4x, D5x, D6x, D7x, D8x, D9x, DAx, DBx, DCx, DDx, DEx, DFx, DQx, DRx, DSx, DTx, DUx, DVx, DWx, DXx, DYx, DZx, E2x, E3x, E4x, E5x, E6x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EKx, ELx, EMx, ENx, EQx, ERx, ESx, EVx, EWx, EXx, EYx, EZx, F2x, F3x, F4x, FEx, FFx, FHx, FJx, FKx, FLx, FMx, FNx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, FXx, FYx, FZx, G4x, H2x, H3x, H4x, HLx, HMx, J7x, J8x, JEx, JFx, JGx, JHx, JJx, JKx, K8x, K9x, KAx, KBx, KPx. KQx, L2x, L4x, L5x, L6x, L9x, LAx (continued)	91P7013	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
5	Wireless LAN antenna (15.0-in.) • 0659-CTO, 92x, 93x, 94x, 95x, 96x, 97x, 99x, 9Bx, 9Dx, H5x, H6x, H7x, H8x, H9x, HAx, HBx, HCx, HDx, HEx, HFx, HGx, JPx, JQx, JRx • 9455-CTO, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Lx, 4Mx, 4Nx, ACx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, K3x, LEx, LFx, LUx, LVx, LWx, MFx, MGx, MHx, MJx, MKx, MLx, MMx • 9456-CTO, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, DRx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, KAx, KLx, L4x, L5x, L6x, L9x, LGx, LHx, LJx, LKx, LXx, LYx, LZx, MRx, MSx, MTx, MUx, MVx • 9457-CTO, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Wx, 94x, 95x, 96x, 97x, 98x, DSx, DTx, DWx, G5x, G6x, G7x, J9x, JAx, JBx, JDx, JFx, JGx, JPx, JHx, JJx, JKx, JLx, JMx, JNx, KCx, KDx, KEx, KFx, KNx, KPx, KRx, LSx • 9458-CTO, 8Rx, 8Qx, L8x, LNx • 9459-CTO, 8Jx, 8Kx, 8Vx, 8Wx, 94x, 95x, 96x, 97x, 98x, CXx, CYx, DNx, FXx, FYx, FZx, G5x, G6x, KKx, LTx • 9444-CTO • 9445-CTO (continued)	91P7013	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
5	Wireless LAN antenna (15.0-in.) • 9460-CTO, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Hx, 3Jx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 9Px, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HEx • 9461-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DYx, HMx, HXx • 9462-CTO, 7Ax, 7Bx, 7Zx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 95x, 96x, 97x, 98x, 9Yx, 9Zx, FBx, FCx, FDx, FEx, FFx, KUx • 9463-CTO, 7Rx, HUx, HVx • 9464-CTO, 3Kx, 7Bx, 7Vx, 7Xx, 95x, 96x, 97x, BZx, DLx, DMx, DNx, DPx, DSx, DVx, DWx • 9446-CTO • 9447-CTO • 8942-CTO, 22x, 32x, 33x, 34x, 37x, 38x, 39x, 3Ax, 3Dx, 3Ex, 3Gx, 46x, 9Qx, A5x, AAx, ABx, ACx, ADx, AEx, ATx, AUx, AVx, AWx • 8943-CTO, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Nx, 4Px, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 56x, 57x, 5Bx, 5Zx, 63x, AGx, ALx, AMx, ANx, APx, AQx, ARx, ASx, BFx, BGx, BHx, BJx, BKx, BMx, BSx, BTx, BUx, BVx, BWx, BXx • 8944-CTO, 66x, 67x, 68x, 6Ax, 6Bx, 6Cx, 6Dx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 73x, 7Bx, 7Cx, 7Dx, 7Ex, 7Gx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 9Ux, 9Vx, 9Wx, AHx, AJx, CBx, CCx, CDx, CEx, CFx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx • 8945-CTO, 7Ux, 7Vx, 7Yx, 7Zx, 84x, 85x, 88x, 89x, 8Dx, AKx, CRx, CSx, CUx, CVx • 8947-CTO, 8Mx, 8Nx, 8Rx, 8Sx, 8Tx, 8Ux, 8Xx, 8Yx, 93x, 94x, 97x, 98x, 99x, 9Ax,9Dx, 9Ex, 9Gx, CYx, CZx, D4x, D5x, D6x, D7x, DAx, DBx, DEx, DFx, DGx, DHx • 8948-CTO, 22x • 8949-CTO, 22x	91P7013	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
6	Inverter card (15.0-in. XGA) • 0656-all • 0657-all • 0658-all • 0659-all • 9455-CTO, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Lx, 4Mx, 4Nx, ACx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, K3x, LEx, LFx, LUx, LVx, LWx, MFx, MGx, MHx, MJx, MKx, MLx, MMx • 9456-CTO, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, DRx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, KAx, KLx, L4x, L5x, L6x, L9x, LGx, LHx, LJx, LKx, LXx, LYx, LZx, MRx, MSx, MTx, MUx, MVx • 9457-CTO, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Wx, 94x, 95x, 96x, 97x, 98x, DSx, DTx, DWx, G5x, G6x, G7x, J9x, JAx, JBx, JDx, JFx, JGx, JPx, JHx, JJx, JKx, JLx, JMx, JNx, KDx, KEx, KFx, KNx, KPx, KRx, LSx • 9458-CTO, 8Rx, 8Qx, L8x, LNx • 9459-CTO, 8Jx, 8Kx, 8Vx, 8Wx, 94x, 95x, 96x, 97x, 98x, CXx, CYx, DNx, FXx, FYx, FZx, G5x, G6x, KKx, LTx • 9444-CTO • 9445-CTO • 9460-CTO, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Hx, 3Jx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 9Px, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HEx • 9461-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DYx, HMx, HXx • 9462-CTO, 7Ax, 7Bx, 7Zx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 95x, 96x, 97x, 98x, 9Yx, 9Zx, FBx, FCx, FDx, FEx, FFx, KUx • 9463-CTO, 7Rx, HUx, HVx • 9464-CTO, 3Kx, 7Bx, 7Vx, 7Xx, 95x, 96x, 97x, BZx, DLx, DMx, DNx, DPx, DSx, DVx, DWx • 9446-CTO • 9447-CTO • 8942-CTO, 22x, 32x, 33x, 34x, 37x, 38x, 39x, 3Ax, 3Dx, 3Ex, 3Gx, 46x, 9Qx, A5x, AAx, ABx, ACx, ADx, AEx, ATx, AUx, AVx, AWx • 8943-CTO, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Nx, 4Px, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 56x, 57x, 5Bx, 5Zx, 63x, AGx, ALx, AMx, ANx, APx, AQx, ARx, ASx, BFx, BGx, BHx, BJx, BKx, BMx, BSx, BTx, BUx, BVx, BWx, BXx • 8944-CTO, 66x, 67x, 68x, 6Ax, 6Bx, 6Cx, 6Dx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 73x, 7Bx, 7Cx, 7Dx, 7Ex, 7Gx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 9Ux, 9Vx, 9Wx, AHx, AJx, CBx, CCx, CDx, CEx, CFx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx • 8945-CTO, 7Ux, 7Vx, 7Yx, 7Zx, 84x, 85x, 88x, 89x, 8Dx, AKx, CRx, CSx, CUx, CVx • 8947-CTO, 8Mx, 8Nx, 8Rx, 8Sx, 8Tx, 8Ux, 8Xx, 8Yx, 93x, 94x, 97x, 98x, 99x, 9Ax,9Dx, 9Ex, 9Gx, CYx, CZx, D4x, D5x, D6x, D7x, DAx, DBx, DEx, DFx, DGx, DHx • 8948-CTO, 22x • 8949-CTO, 22x			
	YEC	41W1467	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
7	Bluetooth daughter card (BDC-2) • 0656-CTO • 0657-CTO, 37x, 39x, 3Bx, 3Cx, 3Lx, 3Mx, 3Nx, 3Rx, 3Sx, 3Wx, 42x, 43x, 47x, 49x, 4Ax, 4Qx, 4Tx, A8x, A9x, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AZx, B4x, B5x, BBx, BCx, BHx, BJx, BKx, BLx, HKx, J5x, J6x, JVx, JXx, K5x, KEx, KFx, KGx, KKx, KGx, KSx, LEx, LNx, LPx • 0658-CTO, 52x, 5Wx, 68x, 6Ex, 6Nx, 6Qx, 6Sx, 6Ux, 6Vx, 6Xx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Jx, 7Vx, 82x, 85x, 86x, 88x, CMx, CQx, CRx, CYx, CZx, D6x, D7x, D8x, D9x, DWx, DXx, DZx, E2x, E3x, E4x, E5x, E7x, E9x, EAx, EBx, ECx, EFx, EQx, ESx, FNx, FQx, FRx, FTx, FUx, FVx, H3x, J7x, JEx, JFx, JHx, JJx, JKx, K8x, KQx • 0659-CTO, 96x, 99x, 9Ax, H6x, HEx, HGx • 9455-CTO, 3Dx, 3Gx, 3Jx, 43x, 44x, 48x, 4Ax, 4Cx, 4Dx, 4Fx, 4Gx, 4Hx, 4Jx, 4Nx, CBx, CCx, CQx, CRx, CSx, K3x • 9456-CTO, 6Dx, 6Ex, 6Fx, 6Gx, 6Zx, DRx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, HTx, K8x, L4x, LJx, LKx • 9457-CTO, 87x, 89x, 8Ax, 8Bx, 8Cx, 8Gx, 8Mx, 97x, 98x, JDx, G5x, G6x, G7x, JFx, JGxJHx, JKx, JKx, JMx, JNx, KDx, KEx, KFx, KRx, LSx • 9458-CTO, L8x, LNx • 9459-CTO, 8Vx, 97x, 98x, FXx, FYx, FZx, G5x, G6x, KKx, LTx • 9444-CTO • 9445-CTO • 9460-CTO, 36x, 37x, 38x, 3Bx, 3Cx, 3Dx, 3Ex, 3Hx, 3Jx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 9Px, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BRx, BUx, BWx, H3x • 9461-CTO, 59x, 5Fx, 5Gx, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DYx, HXx • 9462-CTO, 7Cx, 7Fx, 7Gx, 7Hx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 7Zx, 98x, 9Yx, 9Zx, FBx, FDx, FEx, FFx, KUx • 9463-CTO • 9464-CTO, 3Kx, 7Xx, BZx, DMx • 9446-CTO • 9447-CTO • 8942-CTO, 34x, 37x, 38x, 3Ax, 3Dx, 3Ex, 9Qx, AUx, AWx • 8943-CTO, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Nx, 4Px, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 56x, 57x, 5Zx, 63x, AGx, BFx, BGx, BHx, BJx, BKx, BMx, BSx, BTx, BUx, BVx, BWx, BXx (continued)	39T0497	R	N

(continued)

<table>
<tr><th>No.</th><th>FRU</th><th>FRU no.</th><th>RoHS ID</th><th>CRU ID</th></tr>
<tr><td>7</td><td>Bluetooth daughter card (BDC-2)
• 8944-CTO, 67x, 68x, 6Cx, 6Dx, 6Gx, 6Hx, 6Kx, 6Mx, 6Qx, 6Rx, 6Ux, 6Vx, 6Xx, 6Zx, 7Cx, 7Ex, 7Gx, 7Jx, 7Px, 7Qx, 7Rx, 9Vx, 9Wx, AHx, AJx, CEx, CGx, CLx, CNx
• 8945-CTO, 7Ux, 7Vx, 7Yx, 7Zx, 84x, 85x, 88x, 89x, AKx, CRx, CSx, CUx, CVx
• 8947-CTO, 8Mx, 8Nx, 8Rx, 8Sx, 8Ux, 8Xx, 8Yx, 93x, 94x, 97x, 98x, 9Ax, 9Dx, 9Ex, CYx, CZx, D4x, D5x, D7x, DAx, DBx, DEx, DFx, DHx
• 8948-CTO
• 8949-CTO</td><td>39T0497</td><td>R</td><td>N</td></tr>
<tr><td rowspan="4">8</td><td colspan="4">LCD panel, 15.0-in. XGA
• 0656-all
• 0657-all
• 0658-all
• 0659-all
• 9455-CTO, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Lx, 4Mx, 4Nx, ACx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CDx, CEx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, K3x, LEx, LFx, LUx, LVx, LWx, MFx, MGx, MHx, MJx, MKx, MLx, MMx
• 9456-CTO, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, DRx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FFx, FGx, FHx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, K8x, KAx, KLx, L4x, L5x, L6x, L9x, LGx, LHx, LJx, LKx, LXx, LYx, LZx, MRx, MSx, MTx, MUx, MVx
• 9457-CTO, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Wx, 94x, 95x, 96x, 97x, 98x, DSx, DTx, DWx, G5x, G6x, G7x, J9x, JAx, JBx, JDx, JFx, JGx, JPx, JHx, JJx, JKx, JLx, JMx, JNx, KDx, KEx, KFx, KNx, KPx, KRx, LSx
• 9458-CTO, 8Rx, 8Qx, L8x, LNx
• 9459-CTO, 8Jx, 8Kx, 8Vx, 8Wx, 94x, 95x, 96x, 97x, 98x, CXx, CYx, DNx, FXx, FYx, FZx, G5x, G6x, KKx, LTx
• 9444-CTO
• 9445-CTO
• 9460-CTO, 36x, 37x, 38x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Ex, 3Fx, 3Hx, 3Jx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 9Px, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BUx, BVx, BWx, H3x, HEx
• 9461-CTO, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, D9x, DAx, DBx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DYx, HMx, HXx
• 9462-CTO, 7Ax, 7Bx, 7Zx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Xx, 95x, 96x, 97x, 98x, 9Yx, 9Zx, FBx, FCx, FDx, FEx, FFx, KUx
• 9463-CTO, 7Rx, HUx. HVx
• 9464-CTO, 3Kx, 7Bx, 7Vx, 7Xx, 95x, 96x, 97x, BZx, DLx, DMx, DNx, DPx, DSx, DVx, DWx

(continued)</td></tr>
<tr><td>Samsung</td><td>13N7122</td><td>R</td><td>N</td></tr>
<tr><td>LG-Phillips</td><td>13N7124</td><td>R</td><td>N</td></tr>
<tr><td>AUO</td><td>13N7126</td><td>R</td><td>N</td></tr>
</table>

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
8	LCD panel, 15.0-in. XGA • 9446-CTO • 9447-CTO • 8942-CTO, 22x, 32x, 33x, 34x, 37x, 38x, 39x, 3Ax, 3Dx, 3Ex, 3Gx, 46x, 9Qx, A5x, AAx, ABx, ACx, ADx, AEx, ATx, AUx, AVx, AWx • 8943-CTO, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Nx, 4Px, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 56x, 57x, 5Bx, 5Zx, 63x, AGx, ALx, AMx, ANx, APx, AQx, ARx, ASx, BFx, BGx, BHx, BJx, BKx, BMx, BSx, BTx, BUx, BVx, BWx, BXx • 8944-CTO, 66x, 67x, 68x, 6Ax, 6Bx, 6Cx, 6Dx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 73x, 7Bx, 7Cx, 7Dx, 7Ex, 7Gx, 7Jx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 9Ux, 9Vx, 9Wx, AHx, AJx, CBx, CCx, CDx, CEx, CFx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx • 8945-CTO, 7Ux, 7Vx, 7Yx, 7Zx, 84x, 85x, 88x, 89x, 8Dx, AKx, CRx, CSx, CUx, CVx • 8947-CTO, 8Mx, 8Nx, 8Rx, 8Sx, 8Tx, 8Ux, 8Xx, 8Yx, 93x, 94x, 97x, 98x, 99x, 9Ax,9Dx, 9Ex, 9Gx, CYx, CZx, D4x, D5x, D6x, D7x, DAx, DBx, DEx, DFx, DGx, DHx • 8948-CTO, 22x • 8949-CTO, 22x			
	Samsung	13N7122	R	N
	LG-Phillips	13N7124	R	N
	AUO	13N7126	R	N
9	Clear plate kit for R60 and R61i • 9455-all • 9456-all • 9457-all • 9458-all • 9459-all • 9444-all • 9445-all • 9460-all • 9461-all • 9462-all • 9463-all • 9464-all • 9446-all • 9447-all	42W2139	R	N
	Clear plate kit for R60e and R61i • 0656-all • 0657-all • 0658-all • 0659-all	42W2140	R	N
	Clear plate kit for R61 and R61i • 8942-all • 8943-all • 8944-all • 8945-all • 8947-all • 8948-all • 8949-all	42X4428	R	N

15.0-in. SXGA+ TFT

No.	FRU	FRU no.	RoHS ID	CRU ID
1	LCD cover kit with IBM Logo (15.0-in.) • 9455-CTO, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Bx, 4Kx, 4Px, 4Qx, 4Rx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BQx, BRx, BUx, DPx, LCx, LDx • 9456-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 6Nx, 6Px, 6Qx, DQx, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, KMx, L2x, L3x, LBx • 9457-CTO, 82x, 83x, 84x, 8Px, DUx, DVx, G4x, J3x, J6x, J7x • 9458-CTO • 9459-CTO, CUx, CVx, G4x • 9444-CTO • 9445-CTO • 9460-CTO, 32x, 33x, 34x, 35x, 3Gx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Xx, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, HBx, HCx • 9461-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, D2x, D3x, D4x, D5x, D6x, D7x, DUx, DXx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HRx, HWx, HYx • 9462-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Yx, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, F2x, F3x, F4x, F7x, F8x, FAx, FGx, GAx, H7x • 9463-CTO, HQx • 9464-CTO, 73x, 7Tx, BYx, GAx • 9446-CTO • 9447-CTO • 8943-CTO, 4Ax, 4Bx, 4Cx, 4Dx, 4Lx, 4Mx, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Vx, 54x, 55x, 58x, 59x, 5Ex, 5Fx, 5Gx, 5Vx, 5Wx, 5Xx, 5Yx, 62x, 64x, 65x, 9Rx, 9Sx, 9Tx, A6x, A7x, A8x, A9x, BBx, BCx, BDx, BEx, BNx, BPx, BQx, BRx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx • 8945-CTO, 7Wx, 7Xx, 82x, 83x, 86x, 87x, 8Ax, 8Bx, 8Gx, 8Hx, 8Jx • 8948-CTO • 8949-CTO	13N7192	R	N
	LCD cover kit with IBM Logo (15.0-in.) • 8942-CTO, 3Kx, 3Lx, 3Mx, 47x, 48x, 49x, AFx • 8944-CTO, 76x, 77x, 78x, 7Ax, 7Sx, 7Tx • 8947-CTO, 9Kx, 9Lx, 9Mx, 9Px • 8948-CTO • 8949-CTO			
	xxB, xxC, xxH, xxV	13N7192	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
1	LCD cover kit with ThinkPad Logo (15.0-in.) • 8942-CTO, 35x, 36x, 3Bx, 3Cx, 9Xx 9Yx, 9Zx, A2x, A3x, A4x, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx • 8944-CTO, 69x, 6Ex, 6Fx, 6Sx, 6Tx, 7Sx, 7Tx • 8947-CTO, 8Kx, 8Lx, 8Px, 8Qx, 8Vx, 8Wx, 8Zx, 92x, 95x, 96x, 9Bx, 9Cx, CWx, CXx, D2x, D3x, D8x, D9x, DCx, DDx • 8948-CTO • 8949-CTO			
	xxA, xxE, xxF, xxG, xxJ, xxK, xxL, xxM, xxP xxQ, xxS, xxT, xxU, xxY	42W3147	R	N
2	Hinge, 15.0-in. • 9455-CTO, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Bx, 4Kx, 4Px, 4Qx, 4Rx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BQx, BRx, BUx, DPx, LCx, LDx • 9456-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 6Nx, 6Px, 6Qx, DQx, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, KMx, L2x, L3x, LBx • 9457-CTO, 82x, 83x, 84x, 8Px, DUx, DVx, G4x, J3x, J6x, J7x • 9458-CTO • 9459-CTO, CUx, CVx, G4x • 9444-CTO • 9445-CTO (continued)	42W2695	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
2	Hinge, 15.0-in. • 9460-CTO, 32x, 33x, 34x, 35x, 3Gx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Xx, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, HBx, HCx • 9461-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, D2x, D3x, D4x, D5x, D6x, D7x, DUx, DXx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HRx, HWx, HYx • 9462-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Yx, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, F2x, F3x, F4x, F7x, F8x, FAx, FGx, GAx, H7x • 9463-CTO, HQx • 9464-CTO, 73x, 7Tx, BYx, GAx • 9446-CTO • 9447-CTO • 8942-CTO, 35x, 36x, 3Bx, 3Cx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 47x, 48x, 49x, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, AFx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx • 8943-CTO, 4Ax, 4Bx, 4Cx, 4Dx, 4Lx, 4Mx, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Vx, 54x, 55x, 58x, 59x, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 62x, 64x, 65x, 9Rx, 9Sx, 9Tx, A6x, A7x, A8x, A9x, BBx, BCx, BDx, BEx, BNx, BPx, BQx, BRx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx • 8944-CTO, 69x, 6Ex, 6Fx, 6Sx, 6Tx, 76x, 77x, 78x, 7Ax, 7Sx, 7Tx • 8945-CTO, 7Wx, 7Xx, 82x, 83x, 86x, 87x, 8Ax, 8Bx, 8Gx, 8Hx, 8Jx • 8947-CTO, 8Kx, 8Lx, 8Px, 8Qx, 8Vx, 8Wx, 8Zx, 92x, 95x, 96x, 9Bx, 9Cx, 9Kx, 9Lx, 9Mx, 9Px, CWx, CXx, D2x, D3x, D8x, D9x, DCx, DDx • 8948-CTO • 8949-CTO	42W2695	R	N
3	LCD cable assembly (15.0-in.) • 9455-CTO, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Bx, 4Kx, 4Px, 4Qx, 4Rx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BQx, BRx, BUx, DPx, LCx, LDx • 9456-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 6Nx, 6Px, 6Qx, DQx, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, KMx, L2x, L3x, LBx • 9457-CTO, 82x, 83x, 84x, 8Px, DUx, DVx, G4x, J3x, J6x, J7x • 9458-CTO • 9459-CTO, CUx, CVx, G4x • 9444-CTO • 9445-CTO (continued)	93P4297	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
3	LCD cable assembly (15.0-in.) • 9460-CTO, 32x, 33x, 34x, 35x, 3Gx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Xx, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, HBx, HCx • 9461-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, D2x, D3x, D4x, D5x, D6x, D7x, DUx, DXx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HRx, HYx • 9462-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Yx, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, F2x, F3x, F4x, F7x, F8x, FAx, FGx, GAx, H7x • 9463-CTO, HQx • 9464-CTO, 73x, 7Tx, BYx, GAx • 9446-CTO • 9447-CTO • 8942-CTO, 35x, 36x, 3Bx, 3Cx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 47x, 48x, 49x, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, AFx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx • 8943-CTO, 4Ax, 4Bx, 4Cx, 4Dx, 4Lx, 4Mx, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Vx, 54x, 55x, 58x, 59x, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 62x, 64x, 65x, 9Rx, 9Sx, 9Tx, A6x, A7x, A8x, A9x, BBx, BCx, BDx, BEx, BNx, BPx, BQx, BRx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx • 8944-CTO, 69x, 6Ex, 6Fx, 6Sx, 6Tx, 76x, 77x, 78x, 7Ax, 7Sx, 7Tx • 8945-CTO, 7Wx, 7Xx, 82x, 83x, 86x, 87x, 8Ax, 8Bx, 8Gx, 8Hx, 8Jx • 8947-CTO, 8Kx, 8Lx, 8Px, 8Qx, 8Vx, 8Wx, 8Zx, 92x, 95x, 96x, 9Bx, 9Cx, 9Kx, 9Lx, 9Mx, 9Px, CWx, CXx, D2x, D3x, D8x, D9x, DCx, DDx • 8948-CTO • 8949-CTO	93P4297	R	N
4	Wireless WAN antenna (15.0-in.) • 9455-CTO, 4Px, 4Qx, 4Rx, BUx • 9456-CTO, 6Nx, 6Px, 6Qx, EYx, EZx, DQx, KMx • 9457-CTO, 8Px, DVx • 9458-CTO • 9459-CTO • 9444-CTO • 9445-CTO • 9460-CTO • 9461-CTO • 9462-CTO • 9463-CTO • 9464-CTO • 9446-CTO • 9447-CTO	91P7015	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
5	Wireless LAN antenna (15.0-in.) • 9455-CTO, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Bx, 4Kx, 4Px, 4Qx, 4Rx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BQx, BRx, BUx, DPx, LCx, LDx • 9456-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 6Nx, 6Px, 6Qx, DQx, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, KMx, L2x, L3x, LBx • 9457-CTO, 82x, 83x, 84x, 8Px, DUx, DVx, G4x, J3x, J6x, J7x • 9458-CTO • 9459-CTO, CUx, CVx, G4x • 9444-CTO • 9445-CTO • 9460-CTO, 32x, 33x, 34x, 35x, 3Gx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Xx, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, HBx, HCx • 9461-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, D2x, D3x, D4x, D5x, D6x, D7x, DUx, DXx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HRx, HWx, HYx • 9462-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Yx, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, F2x, F3x, F4x, F7x, F8x, FAx, FGx, GAx, H7x • 9463-CTO, HQx • 9464-CTO, 73x, 7Tx, BYx, GAx • 9446-CTO • 9447-CTO • 8942-CTO, 35x, 36x, 3Bx, 3Cx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 47x, 48x, 49x, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, AFx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx • 8943-CTO, 4Ax, 4Bx, 4Cx, 4Dx, 4Lx, 4Mx, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Vx, 54x, 55x, 58x, 59x, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 62x, 64x, 65x, 9Rx, 9Sx, 9Tx, A6x, A7x, A8x, A9x, BBx, BCx, BDx, BEx, BNx, BPx, BQx, BRx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx • 8944-CTO, 69x, 6Ex, 6Fx, 6Sx, 6Tx, 76x, 77x, 78x, 7Ax, 7Sx, 7Tx • 8945-CTO, 7Wx, 7Xx, 82x, 83x, 86x, 87x, 8Ax, 8Bx, 8Gx, 8Hx, 8Jx • 8947-CTO, 8Kx, 8Lx, 8Px, 8Qx, 8Vx, 8Wx, 8Zx, 92x, 95x, 96x, 9Bx, 9Cx, 9Kx, 9Lx, 9Mx, 9Px, CWx, CXx, D2x, D3x, D8x, D9x, DCx, DDx • 8948-CTO • 8949-CTO	91P7013	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
6	Inverter card (15.0-in. SXGA+) • 9455-CTO, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Bx, 4Kx, 4Px, 4Qx, 4Rx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BQx, BRx, BUx, DPx, LCx, LDx • 9456-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 6Nx, 6Px, 6Qx, DQx, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, KMx, L2x, L3x, LBx • 9457-CTO, 82x, 83x, 84x, 8Px, DUx, DVx, G4x, J3x, J6x, J7x • 9458-CTO • 9459-CTO, CUx, CVx, G4x • 9444-CTO • 9445-CTO • 9460-CTO, 32x, 33x, 34x, 35x, 3Gx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Xx, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, HBx, HCx • 9461-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, D2x, D3x, D4x, D5x, D6x, D7x, DUx, DXx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HRx, HWx, HYx • 9462-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Yx, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, F2x, F3x, F4x, F7x, F8x, FAx, FGx, GAx, H7x • 9463-CTO, HQx • 9464-CTO, 73x, 7Tx, BYx, GAx • 9446-CTO • 9447-CTO • 8942-CTO, 35x, 36x, 3Bx, 3Cx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 47x, 48x, 49x, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, AFx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx • 8943-CTO, 4Ax, 4Bx, 4Cx, 4Dx, 4Lx, 4Mx, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Vx, 54x, 55x, 58x, 59x, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 62x, 64x, 65x, 9Rx, 9Sx, 9Tx, A6x, A7x, A8x, A9x, BBx, BCx, BDx, BEx, BNx, BPx, BQx, BRx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx • 8944-CTO, 69x, 6Ex, 6Fx, 6Sx, 6Tx, 76x, 77x, 78x, 7Ax, 7Sx, 7Tx • 8945-CTO, 7Wx, 7Xx, 82x, 83x, 86x, 87x, 8Ax, 8Bx, 8Gx, 8Hx, 8Jx • 8947-CTO, 8Kx, 8Lx, 8Px, 8Qx, 8Vx, 8Wx, 8Zx, 92x, 95x, 96x, 9Bx, 9Cx, 9Kx, 9Lx, 9Mx, 9Px, CWx, CXx, D2x, D3x, D8x, D9x, DCx, DDx • 8948-CTO • 8949-CTO			
	YEC	41W1467	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
7	Bluetooth daughter card (BDC-2) • 9455-CTO, 32x, 38x, 39x, 3Ax, 4Bx, 4Px, 4Qx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BRx, BUx, DPx, LCx, LDx • 9456-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 6Nx, 6Px, 6Qx, DQx, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, KMx, L2x, L3x, LBx • 9457-CTO, 83x, 84x, G4x, J3x, J6x, J7x • 9458-CTO, 8Qx, 8Rx • 9459-CTO, CUx, CVx, G4x • 9444-CTO • 9445-CTO • 9460-CTO, 32x, 33x, 34x, 3Gx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Xx, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BBx, BCx, BDx, HBx • 9461-CTO, 54x, 57x, 58x, D2x, D3x, D4x, D5x, D6x, D7x, DXx, DZx, KSx, H4x, HGx, HHx, HJx, HRx, HYx • 9462-CTO, 75x, 76x, 77x, 79x, 7Yx, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, F2x, F7x, F8x, FAx, FGx, GAx, H7x • 9463-CTO, HQx • 9464-CTO, 7Tx, BYx, GAx • 9446-CTO • 9447-CTO • 8942-CTO, 36x, 3Cx, 3Kx, 3Lx, 3Mx • 8943-CTO, 4Ax, 4Bx, 4Cx, 4Dx, 4Lx, 4Mx, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Vx, 54x, 55x, 58x, 59x, 5Ex, 5Fx, 5Gx, 62x, 64x, 65x, 9Rx, 9Sx, 9Tx, BBx, BCx, BDx, BEx, BNx, BPx, BQx, BRx • 8944-CTO, 69x, 6Ex, 6Fx, 6Sx, 6Tx, 76x, 77x, 78x, 7Sx, 7Tx • 8945-CTO, 7Wx, 7Xx, 82x, 83x, 86x, 87x, 8Ax, 8Bx, 8Gx, 8Hx, 8Jx • 8947-CTO, 8Kx, 8Lx, 8Px, 8Qx, 8Wx, 8Zx, 92x, 95x, 96x, 9Cx, 9Kx, 9Lx, 9Mx, CWx, CXx, D2x, D3x, D8x, D9x, DCx, DDx • 8948-CTO • 8949-CTO	39T0497	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
8	LCD panel, 15.0-in. SXGA+ • 9455-CTO, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Bx, 4Kx, 4Px, 4Qx, 4Rx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BLx, BMx, BNx, BPx, BQx, BRx, BUx, DPx, LCx, LDx • 9456-CTO, 62x, 63x, 64x, 65x, 66x, 67x, 6Nx, 6Px, 6Qx, DQx, E4x, E5x, E6x, E7x, EAx, EBx, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EVx, EWx, EXx, EYx, EZx, KMx, L2x, L3x, LBx • 9457-CTO, 82x, 83x, 84x, 8Px, DUx, DVx, G4x, J3x, J6x, J7x • 9458-CTO • 9459-CTO, CUx, CVx, G4x • 9444-CTO • 9445-CTO • 9460-CTO, 32x, 33x, 34x, 35x, 3Gx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Xx, B2x, B3x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, HBx, HCx • 9461-CTO, 52x, 53x, 54x, 55x, 56x, 57x, 58x, D2x, D3x, D4x, D5x, D6x, D7x, DUx, DXx, DZx, H4x, H5x, KSx, HGx, HHx, HJx, HKx, HRx, HWx, HYx • 9462-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Yx, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, F2x, F3x, F4x, F7x, F8x, FAx, FGx, GAx, H7x • 9463-CTO, HQx • 9464-CTO, 73x, 7Tx, BYx, GAx • 9446-CTO • 9447-CTO • 8942-CTO, 35x, 36x, 3Bx, 3Cx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 47x, 48x, 49x, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, AFx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx • 8943-CTO, 4Ax, 4Bx, 4Cx, 4Dx, 4Lx, 4Mx, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 4Vx, 54x, 55x, 58x, 59x, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 62x, 64x, 65x, 9Rx, 9Sx, 9Tx, A6x, A7x, A8x, A9x, BBx, BCx, BDx, BEx, BNx, BPx, BQx, BRx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx • 8944-CTO, 69x, 6Ex, 6Fx, 6Sx, 6Tx, 76x, 77x, 78x, 7Ax, 7Sx, 7Tx • 8945-CTO, 7Wx, 7Xx, 82x, 83x, 86x, 87x, 8Ax, 8Bx, 8Gx, 8Hx, 8Jx • 8947-CTO, 8Kx, 8Lx, 8Px, 8Qx, 8Vx, 8Wx, 8Zx, 92x, 95x, 96x, 9Bx, 9Cx, 9Kx, 9Lx, 9Mx, 9Px, CWx, CXx, D2x, D3x, D8x, D9x, DCx, DDx • 8948-CTO • 8949-CTO			
	Samsung	13N7128	R	N
	LG-Phillips	42T0350	R	N

(continued)

No.	FRU	FRU no.	RoHS ID	CRU ID
9	Clear plate kit for R60 and R61i • 9455-all • 9456-all • 9457-all • 9458-all • 9459-all • 9444-CTO • 9445-CTO • 9460-all • 9461-all • 9462-all • 9463-all • 9464-all • 9446-CTO • 9447-CTO	42W2139	R	N
	Clear plate kit for R61 and R61i • 8942-all • 8943-all • 8944-all • 8945-all • 8947-all • 8948-all • 8949-all	42X4428	R	N

Keyboard

Keyboard for R60, R60e, and R61i

- 0656-all
- 0657-all
- 0658-all
- 0659-all
- 9455-all
- 9456-all
- 9457-all
- 9458-all
- 9459-all
- 9460-all
- 9461-all
- 9462-all
- 9463-all
- 9464-all

(continued)

Language	P/N (ALPS)	P/N (Chicony)	P/N (NMB)	RoHS ID	CRU ID
Arabic	39T7321	39T7310	39T7308	R	**
Belgian	39T7122	39T7182	39T0962		
Canadian, multilanguage (445)	39T7119	39T7179	39T0959		
Chinese, Traditional	39T7145	39T7205	39T0985		
Czech	39T7123	39T7183	39T0963		
Danish	39T7124	39T7184	39T0964		
Dutch	39T7318	39T7316	39T7314		
English, U.K.	39T7142	39T7202	39T0982		
English, U.S.	39T7118	39T7178	39T0958		
English, U.S. (International, with a Euro symbol)	39T7143	39T7203	39T0983		
Finnish, Swedish	39T7139	39T7199	39T0979		
French, Canadian (058)	39T7120	39T7009	39T0960		
French, Acnor Canadian	—	—	39T7468		
French, European	39T7460	39T7458	39T7456		
German	39T7454	39T7452	39T7450		
Greek	39T7128	39T7188	39T0968		
Hebrew	39T7130	39T7190	39T0970		
Hungarian	39T7003	39T7189	39T0969		
Icelandic	—	—	42T3004		
Italian	39T7131	39T7191	39T0971		
Japanese	39T7144	39T7010	39T0984		
Korean	39T7215	39T7011	39T7213		
Norwegian	39T7004	39T7193	39T0973		
Polish	39T7134	39T7194	39T0974		
Portuguese	39T7135	39T7195	39T0975		
Portuguese, Brazilian	39T7299	39T7301	39T7297		
Russian	39T7136	39T7196	39T0976		
Slovak	39T7005	39T7197	39T0977		
Slovenian	39T7006	39T7198	39T0978		
Spanish, European	39T7002	39T7185	39T0965		
Spanish, Latin American	39T7147	39T7008	39T0987		
Swiss	39T7007	39T7200	39T0980		
Thai	39T7146	39T7206	39T0986		
Turkish	39T7141	39T7201	39T0981		

Keyboard for R61 and R61i

- 8942-all
- 8943-all
- 8944-all
- 8945-all
- 8947-all

(continued)

Language	P/N (ALPS)	P/N (Chicony)	P/N (NMB)	RoHS ID	CRU ID
Arabic	42T3212	42T3276	42T3146	R	**
Belgian	42T3213	42T3277	42T3147		
Chinese, Traditional	42T3236	42T3300	42T3170		
Czech	42T3214	42T3278	42T3148		
Danish	42T3215	42T3279	42T3149		
Dutch	42T3223	42T3287	42T3157		
English, U.K.	42T3233	42T3297	42T3167		
English, U.S.	42T3209	42T3273	42T3143		
English, U.S. (International, with a Euro symbol)	42T3234	42T3298	42T3168		
Finnish, Swedish	42T3230	42T3294	42T3164		
French, Canadian (058)	42T3211	42T3275	42T3145		
French, Acnor Canadian	42T3210	42T3274	42T3144		
French, European	42T3217	42T3281	42T3151		
German	42T3218	42T3282	42T3152		
Greek	42T3219	42T3283	42T3153		
Hebrew	42T3221	42T3285	42T3155		
Hungarian	42T3220	42T3284	42T3154		
Icelandic	—	—	42T3175		
Italian	42T3222	42T3286	42T3156		
Japanese	42T3235	42T3299	42T3169		
Korean	42T3239	42T3303	42T3173		
Norwegian	42T3224	42T3288	42T3158		
Polish	42T3225	42T3289	42T3159		
Portuguese	42T3226	42T3290	42T3160		
Portuguese, Brazilian	42T3240	42T3304	42T3174		
Russian	42T3227	42T3291	42T3161		
Slovak	42T3228	42T3292	42T3162		
Slovenian	42T3229	42T3293	42T3163		
Spanish, European	42T3216	42T3280	42T3150		
Spanish, Latin American	42T3238	42T3302	42T3172		
Swiss	42T3231	42T3295	42T3165		
Thai	42T3237	42T3301	42T3171		
Turkish	42T3232	42T3296	42T3166		

Recovery discs

Windows XP Professional CDs

Windows XP Professional is preinstalled as the operating system in the following models:

- 0656-CTO, 23x, 24x, 29x, 2Cx, 2Dx
- 0657-CTO, 34x, 38x, 39x, 3Ax, 3Cx, 3Ex, 3Gx, 3Hx, 3Kx, 3Nx, 3Rx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 43x, 45x, 47x, 48x, 4Dx, 4Ex, 4Jx, 4Lx, 4Mx, 4Nx, 4Sx, 4Tx, 4Ux, 8Rx, 8Sx, 8Tx, 8Ux, 9Ex, 9Fx, 9Gx, 9Hx
- 0658-CTO, 52x, 53x, 56x, 57x, 5Ax, 5Bx, 5Cx, 5Dx, 5Gx, 5Jx, 5Kx, 5Qx, 5Rx, 5Xx, 5Yx, 62x, 64x, 65x, 67x, 6Ax, 6Cx, 6Ex, 6Gx, 6Hx, 6Kx, 6Ux, 6Yx, 6Zx, 7Ex, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Zx, 85x, 86x, 87x, 88x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Mx, 9Jx, 9Kx, 9Lx, 9Mx, 9Nx
- 0659-CTO, 92x, 94x, 96x, 97x, 98x, 9Dx
- 9455-CTO, 22x, 23x, 24x, 26x, 27x, 29x, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Jx, 32x, 33x, 34x, 35x, 36x, 38x, 39x, 3Bx, 3Cx, 3Dx, 3Ex, 3Gx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 45x, 46x, 48x, 49x, 4Ax, 4Kx, 4Lx, 4Nx, 4Px, 4Qx, 4Rx, 7Xx
- 9456-CTO,54x, 5Ax, 5Bx, 5Ex, 5Hx, 5Jx, 5Kx, 5Mx, 5Sx, 5Tx, 5Ux, 5Vx, 63x, 66x, 68x, 6Ax, 6Dx, 6Ex, 6Fx, 6Gx, 6Jx, 6Kx, 6Nx, 6Px, 6Qx, 6Ux, 6Vx, 6Wx, 6Xx, 6Zx
- 9457-CTO, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Kx, 7Lx, 7Px, 82x, 83x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Ex, 8Gx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Wx, 92x, 93x, 94x, 95x, 96x, 97x
- 9458-CTO, 7Mx, 8Qx, 8Rx
- 9459-CTO, 74x, 7Gx, 7Px, 7Rx, 8Jx, 8Kx, 8Wx, 92x, 93x, 94x, 95x, 96x, 97x, 99x, 9Ax, 9Bx
- 9460-CTO, 24x, 25x, 26x, 27x, 2Ax, 2Bx, 2Cx, 2Dx, 2Gx, 2Hx, 2Jx, 2Kx, 33x, 34x, 35x, 37x, 38x, 39x, 3Ax, 3Cx, 3Dx, 3Ex, 3Fx, 3Xx, 8Jx, 9Px
- 9461-CTO, 42x, 4Ax, 4Bx, 4Jx, 4Mx, 4Nx, 4Sx, 4Tx, 4Ux, 4Vx, 4Wx, 4Xx, 52x, 54x, 56x, 57x, 58x, 59x, 5Cx, 5Ex, 5Fx, 5Gx, 5Kx, 5Lx, 5Mx, 5Nx
- 9462-CTO, 62x, 63x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Wx, 72x, 73x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 7Nx, 7Px, 7Qx, 7Xx, 8Hx, 92x, 93x, 94x, 95x, 96x, 97x, 98x
- 9463-CTO, 7Rx, 82x
- 9464-CTO, 63x, 69x, 6Wx, 73x, 7Bx, 7Xx, 92x, 93x, 94x, 95x, 96x, 97x

(continued)

Language	P/N	RoHS ID	CRU ID
Arabic	42J7537	R	*
Chinese, Simplified	42J7530		
Chinese, Traditional	42J7531		
Chinese, Traditional (Hong Kong S.A.R.)	42J7532		
Czech	42J7536		
Danish	42J7526		
Dutch	42J7529		
English, U.K.	42J7518		
English, U.S.	42J7517		
Finnish	42J7527		
French	42J7520		
German	42J7521		
Greek	42J7541		
Hebrew, English enabled	42J7534		
Hungarian	42J7540		
Italian	42J7523		
Japanese	42J7533		
Korean	42J7542		
Norwegian	42J7528		
Polish	42J7535		
Portuguese, Brazilian	42J7524		
Russian	42J7538		
Russian, English enabled	42J7519		
Slovenian	42J7543		
Spanish	42J7522		
Swedish	42J7525		
Turkish	42J7539		

(continued)

- 0656-CTO, A4x
- 0657-CTO, A9x, ACx, ADx, AEx, AFx, AGx, ASx, AUx, AVx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BLx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx, CBx, CCx, CEx, HKx, HQx, HRx, HSx, HTx, HUx, HVx, KCx, KDx, KEx, KFx, KGx, KSx, LFx
- 0658-CTO, CKx, CLx, CMx, CNx, CPx, CQx, CRx, CSx, CTx, CUx, CVx, CWx, CXx, CYx, CZx, D2x, D3x, D4x, D5x, D6x, D7x, D8x, D9x, DAx, DBx, DCx, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DLx, DMx, DNx, DPx, DSx, DUx, DXx, E2x, E3x, E7x, E8x, ECx, EDx, EEx, EFx, EGx, EHx, EUx, EWx, EYx, F2x, F4x, F7x, F8x, F9x, FAx, FBx, FCx, FDx, FEx, FFx, FHx, FNx, FPx, FUx, G4x, H4x, HLx, HMx, HNx, HPx, L5x, L6x, L7x, L8x
- 0659-CTO, 92x, 94x, 96x, 97x, 98x, 9Dx, H6x, H7x, H8x, H9x, HAx, HBx, HEx, HFx, HGx
- 9455-CTO, A4x, A5x, A8x, AFx, AGx, AHx, ANx, APx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BUx, BVx, BXx, C2x, C8x, C9x, CAx, CDx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, DPx
- 9456-CTO, D9x, DJx, DKx, DLx, DMx, DQx, DRx, E5x, E6x, E7x, ECx, EDx, EEx, EFx, EGx, EHx, EJx, EKx, ELx, EMx, ENx, EPx, EQx, ERx, ESx, ETx, EUx, EYx, EZx, F3x, F4x, F5x, F6x, FAx, FBx, FCx, FJx, FKx, FLx, FMx, FNx, FPx, FQx, FRx, FSx, FTx, FUx, FVx, FWx, HTx, LHx
- 9457-CTO, DTx, DSx, DUx, DVx, DWx, G2x, G3x, G4x, G5x, G6x, G7x, G8x, H4x, H6x, H7x, H8x, HBx, HCx, HHx, HJx, HKx, HPx, HQx, HRx, HSx, J6x, J7x, J9x, JAx, JBx, JDx, JFx, JHx, JJx, JKx, JMx, JNx, JPx
- 9458-CTO,LLx, LMx, LNx
- 9459-CTO, ASx, ATx, AUx, AWx, AXx, AZx, CUx, CVx, CXx, CYx, DNx, FYx, FZx, G2x, G3x, G4x, G5x, G6x, G9x
- 9460-CTO, A8x, AMx, AYx, B2x, B6x, B7x, B8x, BDx, BFx, BGx, BHx, BNx, BPx, BQx, BUx
- 9461-CTO, C8x, C9x, CAx, D5x, D6x, D7x, DDx, DEx, DFx, DGx, DHx, DJx, DKx, DUx, DXx, DYx, DZx
- 9462-CTO, E2x, E5x, E6x, E7x, E9x, EAx, EBx, ECx, EDx, EEx, EHx, EJx, EKx, ELx, F2x, F3x, F7x, F8x, FAx, FBx, FCx, FEx, FFx, FGx, G8x, G9x, GAx
- 9463-CTO, LPx
- 9464-CTO, BZx, CEx, CFx, CGx, CHx, DLx, DMx, DNx, DPx, DVx, DWx, G9x, GAx

(continued)

Language	P/N	RoHS ID	CRU ID
Arabic	43T6161	R	*
Chinese, Simplified	43T6166		
Chinese, Traditional	43T6167		
Chinese, Traditional (Hong Kong S.A.R.)	43T6168		
Czech	43T6157		
Danish	43T6155		
Dutch	43T6156		
English, U.K.	43T6149		
English, U.S.	43T6145		
Finnish	43T6158		
French	43T6146		
German	43T6147		
Greek	43T6165		
Hebrew, English enabled	43T6159		
Hungarian	43T6164		
Italian	43T6151		
Japanese	43T6152		
Korean	43T6169		
Norwegian	43T6153		
Polish	43T6160		
Portuguese, Brazilian	43T6150		
Russian	43T6162		
Russian, English enabled	43T6561		
Slovenian	43T6170		
Spanish	43T6148		
Swedish	43T6154		
Turkish	43T6163		

(continued)

- 8942-CTO, 9Qx, 9Zx, A2x, A3x, A4x, A5x
- 8943-CTO, A8x, A9x, ASx
- 8944-CTO, 9Ux, 9Vx, 9Wx
- 8945-CTO
- 8947-CTO

Language	**P/N**	**RoHS ID**	**CRU ID**
Arabic	44Y0930	R	*
Chinese, Simplified	44Y0935		
Chinese, Traditional	44Y0936		
Chinese, Traditional (Hong Kong S.A.R.)	44Y0937		
Czech	44Y0926		
Danish	44Y0924		
Dutch	44Y0925		
English, U.K.	44Y0918		
English, U.S.	44Y0914		
Finnish	44Y0927		
French	44Y0915		
German	44Y0916		
Greek	44Y0934		
Hebrew, English enabled	44Y0928		
Hungarian	44Y0933		
Italian	44Y0920		
Japanese	44Y0921		
Korean	44Y0938		
Norwegian	44Y0922		
Polish	44Y0929		
Portuguese, Brazilian	44Y0919		
Russian	44Y0931		
Russian, English enabled	44Y0940		
Slovenian	44Y0939		
Spanish	44Y0917		
Swedish	44Y0923		
Turkish	44Y0932		

Windows XP Home Edition CDs

Windows XP Home Edition is preinstalled as the operating system in the following models:

- 0656-CTO, 22x, 25x, 26x
- 0657-CTO, 33x, 35x, 36x, 37x, 3Bx, 3Fx, 3Jx, 3Lx, 3Mx, 3Sx, 42x, 46x, 4Ax, 4Fx, 4Gx, 4Hx, 4Kx, 4Qx, 4Rx
- 0658-CTO, 54x, 55x, 58x, 59x, 5Ex, 5Fx, 5Hx, 5Lx, 5Mx, 5Nx, 5Px, 5Sx, 5Tx, 5Vx, 5Wx, 5Zx, 63x, 66x, 68x, 69x, 6Bx, 6Dx, 6Jx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Vx, 6Wx, 6Xx, 72x, 73x, 74x, 75x, 76x, 77x, 78x, 79x, 7Ax, 7Bx, 7Cx, 7Dx, 7Fx, 7Gx, 7Hx, 7Jx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Wx, 7Xx, 7Yx, 82x, 83x, 84x, 89x, 8Kx, 8Lx, 8Nx, 8Px, 8Qx, KZx, L3x
- 0659-CTO, 93x, 95x, 99x, 9Ax, 9Bx, 9Cx
- 9455-CTO, 25x, 28x, 2Ax, 2Gx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 3Ax, 3Fx, 3Hx, 43x, 44x, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Mx, 7Tx, 7Ux, 7Yx
- 9456-CTO,59x, 5Dx, 5Gx, 5Rx, 6Rx, 6Sx, 6Tx
- 9457-CTO, 7Jx, 7Vx, 7Wx, 84x, 8Hx, 98x
- 9458-CTO
- 9459-CTO, 7Sx, 8Vx, 98x
- 9460-CTO, 22x, 23x, 28x, 29x, 2Ex, 2Fx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Tx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 2Zx, 32x, 36x, 3Bx, 3Gx, 3Hx, 3Jx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx
- 9461-CTO, 47x, 4Hx, 4Lx, 5Bx
- 9462-CTO,64x, 6Vx, 6Xx, 6Yx, 6Zx, 74x, 7Mx, 7Yx, 7Zx, 9Qx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx
- 9463-CTO
- 9464-CTO, 3Kx, 7Tx, 7Vx, 84x, 86x, 88x

(continued)

Language	P/N	RoHS ID	CRU ID
Arabic	42J7753	R	*
Chinese, Simplified	42J7746		
Chinese, Traditional	42J7747		
Chinese, Traditional (Hong Kong S.A.R.)	42J7748		
Czech	42J7752		
Danish	42J7742		
Dutch	42J7745		
English, U.K.	42J7734		
English, U.S.	42J7733		
Finnish	42J7743		
French	42J7736		
German	42J7737		
Greek	42J7757		
Hebrew	42J9033		
Hebrew, English enabled	42J7750		
Hungarian	42J7756		
Italian	42J7739		
Japanese	42J7749		
Korean	42J7758		
Norwegian	42J7744		
Polish	42J7751		
Portuguese, Brazilian	42J7740		
Russian	42J7754		
Russian, English enabled	42J7735		
Slovenian	42J7759		
Spanish	42J7738		
Swedish	42J7741		
Turkish	42J7755		

(continued)

- 0656-CTO, A3x
- 0657-CTO, A8x, AAx, ARx, ATx, AWx
- 0658-CTO, DQx, DRx, DTx, DVx, DWx, DYx, DZx, E4x, E5x, E6x, E9x, EAx, EBx, EJx, EKx, ELx, EMx, ENx, EQx, ERx, ESx, ETx, EVx, EXx, EZx, F3x, FQx, FRx, FSx, FTx, FVx, FWx, FXx, FYx, FZx, G3x, H2x, H3x
- 0659-CTO, HCx, HDx
- 9455-CTO, A9x, AAx, ABx, ALx, BRx, C4x, C7x, CCx, CQx, CRx,
- 9456-CTO, A2x, A6x, A7x, A9x, AAx, ABx, ACx, ADx, AEx, AJx, AKx, ALx, AMx, AQx, ARx, BKx, BLx, BRx, BTx, BWx, BYx, BZx, C3x, C4x, C5x, C6x, C7x, CBx, CCx, CEx, CFx, CQx, CRx, CSx
- 9457-CTO, H2x, H3x, HAx, HDx, HEx, HFx, HGx, HMx, HNx, J3x, JGx, JLx
- 9458-CTO
- 9459-CTO, AVx, FXx
- 9460-CTO, A3x, A4x, A5x, A6x, A7x, A9x, AAx, ACx, AEx, AFx, AGx, AHx, AJx, AKx, ALx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, B3x, B5x, B9x, BAx, BBx, BCx, BEx, BJx, BKx, BLx, BMx, BRx, BSx, BVx, BWx
- 9461-CTO, CKx
- 9462-CTO, E4x, F4x, FDx
- 9463-CTO
- 9464-CTO, BYx, CDx, CJx, DSx

(continued)

Language	P/N	RoHS ID	CRU ID
Arabic	43T6369	R	*
Chinese, Simplified	43T6374		
Chinese, Traditional	43T6375		
Chinese, Traditional (Hong Kong S.A.R.)	43T6376		
Czech	43T6365		
Danish	43T6363		
Dutch	43T6364		
English, U.K.	43T6357		
English, U.S.	43T6353		
Finnish	43T6366		
French	43T6354		
German	43T6355		
Greek	43T6373		
Hebrew	43T6378		
Hebrew, English enabled	43T6367		
Hungarian	43T6372		
Italian	43T6359		
Japanese	43T6360		
Korean	43T6377		
Norwegian	43T6361		
Polish	43T6368		
Portuguese, Brazilian	43T6358		
Russian	43T6370		
Russian, English enabled	43T6569		
Spanish	43T6356		
Swedish	43T6362		
Turkish	43T6371		

Windows Vista Home Premium (32 bit) DVDs

Windows Vista Home Premium is preinstalled as the operating system in the following models:

- 0656-CTO
- 0657-CTO, KNx
- 0658-CTO, JKx
- 0659-CTO
- 9455-CTO
- 9456-CTO, M4x, M5x
- 9457-CTO
- 9458-CTO
- 9459-CTO
- 9460-CTO
- 9461-CTO, M6x
- 9462-CTO, HAx, HTx
- 9463-CTO
- 9464-CTO

(continued)

Language	P/N	RoHS ID	CRU ID
Chinese, Simplified	43T7322	R	*
Chinese, Traditional	43T7323		
Chinese, Traditional (Hong Kong S.A.R.)	43T7324		
Czech	43T7315		
Danish	43T7927		
Dutch	43T7314		
English, U.K.	43T7303		
English, U.S.	43T7302		
Finnish	43T7316		
French	43T7305		
German	43T7306		
Greek	43T7321		
Hebrew	43T7326		
Hungarian	43T7320		
Italian	43T7309		
Japanese	43T7310		
Korean	43T7325		
Norwegian	43T7923		
Polish	43T7317		
Portuguese, Brazilian	43T7308		
Russian	43T7318		
Russian, English enabled	43T7304		
Slovenian	43T7327		
Spanish	43T7307		
Swedish	43T7925		
Turkish	43T7319		

(continued)

- 8942-CTO, 46x, 47x, 48x, 49x
- 8943-CTO
- 8944-CTO, 7Ax, 7Gx, 7Jx
- 8945-CTO
- 8947-CTO, 9Px

Language	P/N	RoHS ID	CRU ID
Chinese, Simplified	44Y0819	R	*
Chinese, Traditional	44Y0820		
Chinese, Traditional (Hong Kong S.A.R.)	44Y0821		
Czech	44Y0812		
Danish	44Y0810		
Dutch	44Y0811		
English, U.K.	44Y0801		
English, U.S.	44Y0799		
Finnish	44Y0813		
French	44Y0802		
German	44Y0803		
Greek	44Y0818		
Hebrew	44Y0824		
Hungarian	44Y0817		
Italian	44Y0806		
Japanese	44Y0807		
Korean	44Y0822		
Norwegian	44Y0808		
Polish	44Y0814		
Portuguese	44Y0828		
Portuguese, Brazilian	44Y0805		
Romanian	44Y0825		
Russian	44Y0815		
Russian, English enabled	44Y0800		
Serbian-Latin	44Y0829		
Slovak	44Y0831		
Slovenian	44Y0823		
Spanish	44Y0804		
Swedish	44Y0809		
Turkish	44Y0816		

- 8942-CTO
- 8943-CTO
- 8944-CTO
- 8945-CTO
- 8947-CTO

Language	P/N	RoHS ID	CRU ID
Chinese, Simplified	44Y2282	R	*
Chinese, Traditional	44Y2283		
Chinese, Traditional (Hong Kong S.A.R.)	44Y2284		
Czech	44Y2275		
Danish	44Y2273		
Dutch	44Y2274		
English, U.K.	44Y2264		
English, U.S.	44Y2262		
Finnish	44Y2276		
French	44Y2265		
German	44Y2266		
Greek	44Y2281		
Hebrew	44Y2287		
Hungarian	44Y2280		
Italian	44Y2269		
Japanese	44Y2270		
Korean	44Y2285		
Norwegian	44Y2271		
Polish	44Y2277		
Portuguese	44Y2289		
Portuguese, Brazilian	44Y2268		
Romanian	44Y2288		
Russian	44Y2278		
Russian, English enabled	44Y2263		
Serbian-Latin	44Y2290		
Slovak	44Y2291		
Slovenian	44Y2286		
Spanish	44Y2267		
Swedish	44Y2272		
Turkish	44Y2279		

Windows Vista Home Basic (32 bit) DVDs

Windows Vista Home Basic is preinstalled as the operating system in the following models:

- 0656-CTO
- 0657-CTO, JVx, JWx, JXx, JYx, JZx, K2x, KJx, KKx, KMx, KTx, KXx, KYx, KUx, LHx, LJx, LKx, LLx, LMx, LNx, LPx
- 0658-CTO, JFx, JGx, JHx, K8x, K9x, KAx, KBx, KPx. KQx, L2x, L4x, L9x, LAx
- 0659-CTO, JPx, JQx
- 9455-CTO, LEx, LFx, LUx, LVx, LWx
- 9456-CTO, L5x, L6x, L9x, LGx, LJx, LXx, LYx, LZx
- 9457-CTO, KGx, KHx, LSx
- 9458-CTO
- 9459-CTO, LTx
- 9460-CTO, HCx, HDx, HEx, HFx, HSx
- 9461-CTO, HGx, HKx, HLx, HMx, HNx, HWx, M7x, M8x
- 9462-CTO, H8x
- 9463-CTO
- 9464-CTO

Language	P/N	RoHS ID	CRU ID
Chinese, Simplified	43T7270	R	*
Chinese, Traditional	43T7271		
Chinese, Traditional (Hong Kong S.A.R.)	43T7272		
Czech	43T7263		
Danish	43T7921		
Dutch	43T7262		
English, U.K.	43T7251		
English, U.S.	43T7250		
Finnish	43T7264		
French	43T7253		
German	43T7254		
Greek	43T7269		
Hebrew	43T7274		
Hungarian	43T7268		
Italian	43T7257		
Japanese	43T7258		
Korean	43T7273		
Norwegian	43T7917		
Polish	43T7265		
Portuguese, Brazilian	43T7256		
Russian	43T7266		
Russian, English enabled	43T7252		
Slovenian	43T7275		
Spanish	43T7255		
Swedish	43T7919		
Turkish	43T7267		

- 8942-CTO, AAx, ABx, ACx, ADx, AEx
- 8943-CTO, AGx
- 8944-CTO, AJx
- 8945-CTO, AKx
- 8947-CTO

Language	P/N	RoHS ID	CRU ID
Chinese, Simplified	44Y2455	R	*
Chinese, Traditional	44Y2456		
Chinese, Traditional (Hong Kong S.A.R.)	44Y2457		
Czech	44Y2448		
Danish	44Y2446		
Dutch	44Y2447		
English, U.K.	44Y2437		
English, U.S.	44Y2435		
Finnish	44Y2449		
French	44Y2438		
German	44Y2439		
Greek	44Y2454		
Hebrew	44Y2460		
Hungarian	44Y2453		
Italian	44Y2442		
Japanese	44Y2443		
Korean	44Y2458		
Norwegian	44Y2444		
Polish	44Y2450		
Portuguese, Brazilian	44Y2441		
Russian	44Y2451		
Russian, English enabled	44Y2436		
Slovenian	44Y2459		
Spanish	44Y2440		
Swedish	44Y2445		
Turkish	44Y2452		

- 8942-CTO
- 8943-CTO, ALx, AMx, ANx, APx, AQx, ARx
- 8944-CTO
- 8945-CTO
- 8947-CTO

Language	**P/N**	**RoHS ID**	**CRU ID**
Chinese, Simplified	44Y2427	R	*
Chinese, Traditional	44Y2428		
Chinese, Traditional (Hong Kong S.A.R.)	44Y2429		
Czech	44Y2420		
Danish	44Y2418		
Dutch	44Y2419		
English, U.K.	44Y2409		
English, U.S.	44Y2407		
Finnish	44Y2421		
French	44Y2410		
German	44Y2411		
Greek	44Y2426		
Hebrew	44Y2432		
Hungarian	44Y2425		
Italian	44Y2414		
Japanese	44Y2415		
Korean	44Y2430		
Norwegian	44Y2416		
Polish	44Y2422		
Portuguese, Brazilian	44Y2413		
Russian	44Y2423		
Russian, English enabled	44Y2408		
Slovenian	44Y2431		
Spanish	44Y2412		
Swedish	44Y2417		
Turkish	44Y2424		

Windows Vista Business (32 bit) DVDs

Windows Vista Business is preinstalled as the operating system in the following models:

- 0656-CTO
- 0657-CTO, J4x, J5x, J6x, JMx, JNx, JSx, JTx, JUx, K3x, K4x, K5x, KLx, KRx, KVx, KWx, LDx, LEx, LGx
- 0658-CTO, J7x, J8x, JEx, JJx, K6x, K7x, LBx, LCx
- 0659-CTO, JRx
- 9455-CTO, K2x, K3x, LCx, LDx
- 9456-CTO, K8x, K9x, KAx, KLx, KMx, L2x, L3x, L4x, LAx, LBx, LKx, M2x
- 9457-CTO, KDx, KEx, KFx, KJx, KNx, KPx, KQx, KRx
- 9458-CTO, L7x, L8x
- 9459-CTO, KKx
- 9460-CTO, H3x, HBx
- 9461-CTO, H4x, H5x, KSx, HHx, HJx, HRx, HXx, HYx
- 9462-CTO, H7x, H9x, KTx, KUx, KVx
- 9463-CTO, HPx, HQx, HUx, HVx, LQx, LRx
- 9464-CTO

Language	P/N	RoHS ID	CRU ID
Chinese, Simplified	43T7220	R	*
Chinese, Traditional	43T7221		
Chinese, Traditional (Hong Kong S.A.R.)	43T7222		
Czech	43T7213		
Danish	43T7915		
Dutch	43T7212		
English, U.K.	43T7201		
English, U.S.	43T7200		
Finnish	43T7214		
French	43T7203		
German	43T7204		
Greek	43T7219		
Hungarian	43T7218		
Italian	43T7207		
Japanese	43T7208		
Korean	43T7223		
Norwegian	43T7911		
Polish	43T7215		
Portuguese, Brazilian	43T7206		
Russian	43T7216		
Russian, English enabled	43T7202		
Slovenian	43T7224		
Spanish	43T7205		
Swedish	43T7913		
Turkish	43T7217		

- 8942-CTO, 22x, 32x, 34x, 35x, 36x, 37x, 39x, 3Ax, 3Bx, 3Cx, 3Dx, 3Gx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 9Xx, 9Yx, AFx, ATx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, B5x, B6x, B7x, B8x, B9x, BAx
- 8943-CTO, 4Cx, 4Dx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Ux, 4Vx, 4Yx, 4Zx, 52x, 53x, 54x, 55x, 5Bx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Zx, 62x, 63x, 64x, 65x, 9Rx, 9Sx, 9Tx, A6x, A7x, BDx, BEx, BHx, BJx, BKx, BMx, BQx, BRx, BUx, BVx, BWx, BXx, BYx, BZx, C2x, C3x, C4x, C5x, C6x, C7x, C8x, C9x, CAx
- 8944-CTO, 66x, 67x, 68x, 6Ax, 6Bx, 6Cx, 6Dx, 6Gx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Ux, 6Wx, 6Xx, 6Yx, 6Zx, 73x, 76x, 77x, 78x, 7Bx, 7Dx, 7Kx, 7Lx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, AHx, CBx, CCx, CDx, CEx, CFx, CGx, CHx, CJx, CKx, CLx, CMx, CNx, CPx, CQx
- 8945-CTO, 7Wx, 7Xx, 86x, 87x, 8Dx, 8Gx, 8Hx, 8Jx, CRx, CSx, CUx, CVx
- 8945-CTO, 7Ux, 7Vx, 7Wx, 7Xx, 84x, 85x, 86x, 87x, 8Dx, 8Gx, 8Hx, 8Jx, CRx, CSx, CUx, CVx
- 8947-CTO, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Rx, 8Sx, 8Tx, 8Ux, 8Vx, 8Wx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Gx, 9Kx, 9Lx, 9Mx, CWx, CXx, CYx, CZx, D2x, D3x, D4x, D5x, D6x, D7x, D8x, D9x, DAx, DBx, DCx, DDx, DEx, DFx, DGx, DHx,
- 8948-CTO, 22x
- 8949-CTO, 22x

Language	P/N	RoHS ID	CRU ID
Chinese, Simplified	44Y2139	R	*
Chinese, Traditional	44Y2140		
Chinese, Traditional (Hong Kong S.A.R.)	44Y2141		
Czech	44Y2132		
Danish	44Y2130		
Dutch	44Y2131		
English, U.K.	44Y2121		
English, U.S.	44Y2119		
Finnish	44Y2133		
French	44Y2122		
German	44Y2123		
Greek	44Y2138		
Hungarian	44Y2137		
Italian	44Y2126		
Japanese	44Y2127		
Korean	44Y2142		
Norwegian	44Y2128		
Polish	44Y2134		
Portuguese	44Y2145		
Portuguese, Brazilian	44Y2125		
Romanian	44Y2144		
Russian	44Y2135		
Russian, English enabled	44Y2120		
Serbian-Latin	44Y2146		
Slovak	44Y2147		
Slovenian	44Y2143		
Spanish	44Y2124		
Swedish	44Y2129		
Turkish	44Y2136		

- 8942-CTO
- 8943-CTO
- 8944-CTO
- 8945-CTO
- 8947-CTO
- 8948-CTO
- 8949-CTO

Language	**P/N**	**RoHS ID**	**CRU ID**
Chinese, Simplified	44Y2252	R	*
Chinese, Traditional	44Y2253		
Chinese, Traditional (Hong Kong S.A.R.)	44Y2254		
Czech	44Y2245		
Danish	44Y2243		
Dutch	44Y2244		
English, U.K.	44Y2234		
English, U.S.	44Y2232		
Finnish	44Y2246		
French	44Y2235		
German	44Y2236		
Greek	44Y2251		
Hungarian	44Y2250		
Italian	44Y2239		
Japanese	44Y2240		
Korean	44Y2255		
Norwegian	44Y2241		
Polish	44Y2247		
Portuguese	44Y2258		
Portuguese, Brazilian	44Y2238		
Romanian	44Y2257		
Russian	44Y2248		
Russian, English enabled	44Y2233		
Serbian-Latin	44Y2259		
Slovak	44Y2260		
Slovenian	44Y2256		
Spanish	44Y2237		
Swedish	44Y2242		
Turkish	44Y2249		

Windows Vista Business (64 bit) DVDs

Windows Vista Business is preinstalled as the operating system in the following models:

- 8942-CTO, 38x, 3Ex
- 8943-CTO, 4Ax, 4Bx, 4Ex, 4Fx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Wx, 4Xx, 56x, 57x, 58x, 59x, BBx, BCx, BFx, BGx, BNx, BPx, BSx, BTx
- 8944-CTO, 69x, 6Ex, 6Fx, 6Hx, 6Sx, 6Tx, 6Vx, 7Cx, 7Ex
- 8944-CTO, 69x, 6Ex, 6Fx, 6Hx, 6Sx, 6Tx, 6Vx, 7Cx, 7Ex,
- 8945-CTO, 7Yx, 7Zx, 82x, 83x, 88x, 89x, 8Ax, 8Bx
- 8945-CTO, 7Yx, 7Zx, 82x, 83x, 88x, 89x, 8Ax, 8Bx
- 8947-CTO, 8Xx, 8Yx, 9Dx, 9Ex

Language	**P/N**	**RoHS ID**	**CRU ID**
Chinese, Simplified	44Y2168	R	*
Chinese, Traditional	44Y2169		
Chinese, Traditional (Hong Kong S.A.R.)	44Y2170		
Czech	44Y2161		
Danish	44Y2159		
Dutch	44Y2160		
English, U.K.	44Y2150		
English, U.S.	44Y2148		
Finnish	44Y2162		
French	44Y2151		
German	44Y2152		
Greek	44Y2167		
Hungarian	44Y2166		
Italian	44Y2155		
Japanese	44Y2156		
Korean	44Y2171		
Norwegian	44Y2157		
Polish	44Y2163		
Portuguese, Brazilian	44Y2154		
Russian	44Y2164		
Russian, English enabled	44Y2149		
Slovenian	44Y2172		
Spanish	44Y2153		
Swedish	44Y2158		
Turkish	44Y2165		

Windows Vista Ultimate (32 bit) DVDs

Windows Vista Ultimate is preinstalled as the operating system in the following models:

- 8942-CTO
- 8943-CTO
- 8944-CTO
- 8945-CTO
- 8947-CTO

Language	P/N	RoHS ID	CRU ID
Chinese, Simplified	44Y0884	R	*
Chinese, Traditional	44Y0885		
Chinese, Traditional (Hong Kong S.A.R.)	44Y0886		
Czech	44Y0877		
Danish	44Y0875		
Dutch	44Y0876		
English, U.K.	44Y0866		
English, U.S.	44Y0864		
Finnish	44Y0878		
French	44Y0867		
German	44Y0868		
Greek	44Y0883		
Hungarian	44Y0882		
Italian	44Y0871		
Japanese	44Y0872		
Korean	44Y0887		
Norwegian	44Y0873		
Polish	44Y0879		
Portuguese, Brazilian	44Y0870		
Russian	44Y0880		
Russian, English enabled	44Y0865		
Slovenian	44Y0888		
Spanish	44Y0869		
Swedish	44Y0874		
Turkish	44Y0881		

Miscellaneous parts

FRU	P/N	RoHS ID	CRU ID
Screw kit (including nylon-coated screws): • M2 x 2.5mm (black), flat head (14) • M2 x 3.5mm (silver), small head (19) • M2 x 3.5mm (black), flat slim head (11) • M2 x 10mm (black), flat head (5) • M2 x 12mm (black), flat head (2) • M2 x 17mm (black), flat head (7) • M2.5 x 6mm (black), flat head (15) • M3 x 2.8mm (black), flat head (4) • M3 x 3mm (black), flat head (2) • Screw cap, dia. 7mm (9) • Hex stud (2)	41W5151	R	N
Base miscellaneous parts : • Slide lever, eject • Ultrabay Steel Bar • Slide lever spring • Bracket puller spring • LED for Ultrabay • Latch, battery eject • Spring, battery eject • Wireless switch lever (14.1-in.) • Wireless switch lever (15.0-in.) • Flap, card bus • Spring, card bus • Rubber foot (front) (2) • Rubber foot (rear) (2) • Insulation sheet, 14.1-in. base cover • Insulation sheet, 15.0-in. base cover • Latch, ODD (for R60e)	41W5149	R	N
System miscellaneous parts: • *(a)* DC in cable • *(b)* Modem cable assembly, MDC-1.5 • *(c)* USB subcard • USB cable • USB/IEEE1394 cable **Note:** Italicized letters in parentheses are references to the exploded view on page 117.	41W5150	R	N

(continued)

<table>
<tr><th>FRU</th><th>P/N</th><th>RoHS ID</th><th>CRU ID</th></tr>
<tr><td colspan="4">System board miscellaneous parts (for R60, R61, and R61i):
• 9455-all
• 9456-all
• 9457-all
• 9458-all
• 9459-all
• 9460-all
• 9461-all
• 9462-all
• 9463-all
• 9464-all
• 8942-all
• 8943-all
• 8944-all
• 8945-all
• 8947-all</td></tr>
<tr><td>• Insulator for card bus
• Insulator for dim
• Insulator for planer
• Insulator for battery and CPU
• CPU support plate
• CU tape for Verizon 15-in.model</td><td>41W5147</td><td>R</td><td>N</td></tr>
<tr><td colspan="4">System board miscellaneous parts (for R60e and R61i):
• 0656-all
• 0657-all
• 0658-all
• 0659-all</td></tr>
<tr><td>• Insulator for card bus
• Insulator for dim
• Insulator for planer
• Insulator for battery and CPU
• CPU support plate</td><td>41W5148</td><td>R</td><td>N</td></tr>
<tr><td>LCD miscellaneous parts (14.1-in.):
• LCD FPC cable
• LCD FPC tube up
• LCD FPC tube low
• Blanck cover for WWAN
• Screw cap, dia. 7mm (9)</td><td>13N7189</td><td>R</td><td>N</td></tr>
<tr><td>LCD miscellaneous parts (15.0-in.):
• LCD FPC cable
• LCD FPC tube up
• LCD FPC tube low
• Blank cover for WWAN
• Blank cover for WLAN MAIN
• Blank cover for WLAN AUX
• Screw cap, dia. 7mm (9)</td><td>13N7190</td><td>R</td><td>N</td></tr>
</table>

AC adapters

FRU	P/N	RoHS ID	CRU ID
2-pin (90 W, 20 V) adapter (models CTO, xxE, xxF, xxJ, xxL, xxP, xxS, xxU, xxY)			
ASTEC	42T5000	R	*
Lite-On	93P5026	R	*
Sanken	92P1114	R	*
2-pin (65 W, 20 V) adapter (models CTO, xxE, xxF, xxJ, xxL, xxP, xxS, xxU, xxY)			
Delta	92P1155	R	*
Lite-On	92P1159	R	*
ASTEC	92P1214	R	*
3-pin (90 W, 20 V) adapter (models CTO, xxA, xxB, xxC, xxG, xxH, xxK, xxM, xxT, xxV) OP			
ASTEC	92P1104	R	*
Lite-On	92P1108	R	*
Sanken	92P1112	R	*
3-pin (65W, 20 V) adapter (models CTO, xxA, xxB, xxC, xxG, xxH, xxK, xxM, xxQ, xxT, xxV) OP			
Delta	92P1153	R	*
Lite-On	92P1157	R	*
ASTEC	92P1212	R	*

Common parts list

Tools

Tool	P/N
Screwdriver kit	95F3598
1/4" drive spinner handle	1650840
1/4" Sq. to 1/4" hex torx adapter	93F2838
TR7-TR-10 tamper resistant torx bits	00P6967
Removal tool antenna RF connector	08K7159
USB 2.0 CD-RW/DVD-ROM combo drive II	40Y8687
USB cable	40Y8704
USB floppy diskette drive for maintenance diskette	05K9283
USB floppy diskette drive tool kit	27L3452
Test card for integrated Smart Card	42W7820
ThinkPad Hardware Maintenance Diskette Version 1.73 or later **Note:** Download the file from the following Web site: http://www.lenovo.com/spm	—

Power cords

A ThinkPad power cord for a specific country or region is usually available only in that country or region:

For 2-pin power cords:

Region	P/N (Longwell)	P/N (Volex)	RoHS ID	CRU ID
Argentina, Uruguay, Paraguay	42T5020	42T5105	R	*
Brazil	42T5180	42T5183		
Canada, U.S.	42T5008	42T5093		
Japan	42T5014	42T5099		

For 3-pin power cords:

Region	P/N (Longwell)	P/N (Volex)	RoHS ID	CRU ID
Australia, New Zealand	42T5050	42T5135	R	*
Bangladesh, South Africa, Sri Lanka	42T5056	42T5141		
China	42T5065	42T5150		
Denmark	42T5041	42T5126		
Europe	42T5029	42T5114		
Hong Kong S.A.R. of China, U.K.	42T5035	42T5120		
India	42T5083	42T5168		
Israel	42T5062	42T5147		
Italy	42T5047	42T5132		
Korea	42T5077	42T5162		
Philippine, Saudi Arabia, Thailand	42T5004	42T5089		
Switzerland	42T5044	42T5129		
Taiwan	42T5071	42T5156		

Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service.

Lenovo may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

Lenovo (United States), Inc.
1009 Think Place - Building One
Morrisville, NC 27560
U.S.A.
Attention: Lenovo Director of Licensing

LENOVO PROVIDES THIS PUBLICATION “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. Lenovo may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary.

Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk.

Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been

estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Trademarks

The following terms are trademarks of Lenovo in the United States, other countries or both:

Lenovo
Active Protection System
Rescue and Recovery
ThinkLight®
ThinkPad®
ThinkVantage®
TrackPoint®
Ultrabay
Ultrabay Enhanced
Ultrabay 2000
Ultrabay Plus
UltraNav®

The following terms are trademarks of the International Business Machines Corporation in the United States, other countries, or both:

IBM (used under license)

The following terms are trademarks of Microsoft Corporation in the United States, other countries, or both:

Windows®
Windows Vista®

The following are trademarks of Intel Corporation or its subsidiaries in the United States, other countries, or both:

Intel®
Intel® Core™
Intel® Core™ Duo
Intel® Core™ Solo
Intel® Core™ 2 Duo
Celeron®

Other company, product, or service names may be the trademarks or service marks of others.